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INTERNATIONAL MONETARY CONFERENCE

HELD,

IN COMPLIANCE WITH THE INVITATION EXTENDED TO CERTAIN GOVERNMENTS OF EUROPE BY THE GOVERNMENT OF THE UNITED STATES, IN PURSUANCE OF THE SECOND SECTION OF THE ACT OF CONGRESS OF FEBRUARY 28, 1878,

IN PARIS, IN AUGUST, 1878,

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UNDER THE AUSPICES OF THE

MINISTRY OF FOREIGN AFFAIRS

OF THE

REPUBLIC OF FRANCE.

BX 247.

Senate Executive Document No. 58, Forty-fifth Congress, Third Session.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1879.

MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES,

COMMUNICATING

Information in relation to the proceedings of the International Monetary Conference held at Paris in August, 1878.

FEBRUARY 6, 1879.—Read, referred to the Committee on Finance, and ordered to be printed.

TO THE SENATE OF THE UNITED STATES:

I transmit herewith, for the information of Congress, a report from the Secretary of State, with the accompanying papers therein referred to, in relation to the proceedings of the International Monetary Conference held at Paris in August, 1878.

R. B. HAYES.

WASHINGTON, *February* 6, 1879.

THE INTERNATIONAL MONETARY CONFERENCE OF 1878.

PROCEEDINGS AND EXHIBITS,

FOLLOWED BY THE

REPORT OF THE AMERICAN COMMISSION

AND

AN APPENDIX

CONTAINING CORRESPONDENCE SUBMITTED TO THE

DEPARTMENT OF STATE

BY

MR. FENTON,

AND

HISTORICAL MATERIAL FOR THE

STUDY OF MONETARY POLICY

CONTRIBUTED BY

MR. HORTON.

DEPARTMENT OF STATE,
Washington, February 6, 1879.

I have the honor to lay before you the Journal of the International Monetary Conference, held at Paris in August last, in compliance with the invitation extended to the governments of Europe by this government pursuant to the second section of the act of February 28, 1878.

The countries represented at the Conference were Austria-Hungary, Belgium, France, Great Britain, Greece, Italy, Netherlands, Russia, Sweden and Norway, Switzerland, and the United States. The Commissioners on the part of the United States were Messrs. Reuben E. Fenton, W. S. Groesbeck, and Francis A. Walker, assisted by the Secretary to the American Commission, Mr. S. Dana Horton, who was admitted to participate in the deliberations of the Conference on an equal footing with the Commissioners.

The Conference was opened at Paris on the 10th day of August, 1878, and seven sessions were held, the last being on the 29th of that month.

The Report of the United States Commissioners, dated October 17, 1878, and heretofore laid before Congress, sums up the proceedings of the Conference and the results attained. A copy of that report is transmitted herewith as a necessary preface to the complete journal.

The deliberations of the Conference were almost exclusively conducted in the French language. The European Delegates, with one exception, spoke entirely in French. An address was however made in English by Dr. Waern, of Sweden, and two or three short passages of debate between Messrs. Goschen, Gibbs, Feer-Herzog, and Groesbeck took place in that tongue. The official journal drawn up by the secretaries appointed by the Conference was, therefore, necessarily in French. Mr. Horton, however, prepared a corresponding English journal from day to day, securing, by good fortune, the services of a person who possessed the rare accomplishment of being not only able to make a faithful stenographic report of the few English addresses before the Conference, but of being able to take down, in short-hand and in English translation, the proceedings which took place in French. This report, written out in fair hand, was used by the American Commissioners as their minutes of the transactions of the preceding sessions, and has been faithfully compared with the official Procès-Verbaux published in French, of which the present English journal of the proceedings is a correct version. The exhibits which were laid before the Conference have been translated into English, and accompany the report as appendices to each day's proceedings. These various considerations will serve to show that the delay in placing the record of the Conference before Congress in an authentic form has been unavoidable.

WM. M. EVARTS.

The PRESIDENT.

NOTE.

The minutes, in English, of the proceedings of the Conference, used by the American Commission during the Conference itself, were prepared by Mr. John R. Alger, of Paris, a stenographer, and at the same time a translator, with the assistance of a copyist and of Mr. D. R. Post, of Jamestown, N. Y., who acted as clerk of the Commission.

By kind permission of Hon. E. F. Noyes, Minister of the United States at Paris, the Commission was attended, during the sessions of the Conference, by Mr. Henry Vignaud, Second Secretary of Legation, and was further enabled to profit by his valuable services while in Paris.

In the preparation of the Report of the Commission, the record prepared during the Conference was supplemented by translating the partially corrected French Journals of the several sessions, which were printed separately from time to time, for the most part subsequently to the close of the Conference. These Journals were, then in the original, subjected to exhaustive revision and correction by all the various parties concerned in them, (all of course under the direction of Mr. Ernest Crampon, the acute and industrious Chief Secretary of the Conference,) proof being repeatedly sent to the different countries to which the delegates had gone.

The exhibits whose presentation had been announced at the Conference, were prepared for final publication in like manner. The volume as thus completed forms the official Journal of the Conference. It was printed in folio in the National Printing Office in Paris as a "Yellow

Book" of the French Government, under the auspices of the Ministry for Foreign Affairs, (of which Mr. Crampon, the Secretary, was an official), and was delivered to the American Commission in Paris November 26, 1878. Of this volume the present Journal is a translation.

The names of the President and Secretaries of the Conference, which, in the original, are affixed to the Journal of each session, are not reproduced in the English version, while in several instances omissions are supplied or errors corrected in notes.

In the Journal of the fourth session the address of General Walker is, with his permission, printed in full, as delivered before the Conference, in place of the abstract of it which appears in the French Journal.

CONTENTS.

PROCEEDINGS OF THE CONFERENCE OF 1878.

	Page.
Journal of the first session (10th August, 1878)	1–6
Exhibit A, by Dr. Broch:	
I. Certain Figures useful in the study of the Monetary Questions	7
II. Comparative table of Gold Coins	9
III. Gold Coins proposed as universal money	10
Exhibit B, by Mr. Ruau:	
Diagram showing the quotations of Silver in the London market	13
Journal of the second session (16th August)	15–33
Exhibit A, by Mr. Goschen:	
A statement of the currency systems of the United Kingdom, its colonies and dependencies	35–40
Exhibit B, by Mr. Mees:	
A statement of the Monetary System of the Netherlands and colonies	41
Exhibit C, by Mr. Fenton:	
List of Documents and Treatises laid upon the table	42
Exhibit D, by Mr. Feer-Herzog:	
Extract from the report and correspondence of John Jay Knox, Comptroller of the Currency, concerning the revision of the coinage laws of the United States	43
Exhibit E, by Mr. de Thoerner:	
Statement of the causes which led the Russian Government to suspend the coinage of Silver roubles	44
Journal of the third session (19th August)	45–65
Journal of the fourth session (22d August)	67–96
Exhibit A, by Mr. von Hengelmüller:	
Statement of the Monetary System of Austria-Hungary	97
Exhibit B, by Mr. de Thoerner:	
Statement of the Monetary System of Russia	99
Exhibit C, by Dr. Broch:	
Statement of the Monetary System of the three Scandinavian Kingdoms	101

Page.
Journal of the fourth session—Continued.
Exhibits D and E, by Mr. Horton:
D—Abstract of the Monetary Legislation of the United States—statement of the circulation and of Coinage, 1792 to 1877 103–105
E—Extract from Alexander Hamilton's Report on the Mint 106
Journal of the fifth session (26th August) 107–136
Exhibit A, by Mr. Garnier:
Statement of the Monetary System of Belgium 137
Exhibit B, by Mr. Baralis:
List of Legislative Documents concerning Monetary System of Italy ... 138
Exhibits C, D, and E, by Mr. Groesbeck:
Letters of Mr. Sherman and of Dr. Linderman to Mr. Groesbeck 139–140
Exhibit F, by Mr. Fenton:
Statement of the Coinage of Gold and Silver in the United States for the fiscal year ending June 30, 1878 141
Journal of the sixth session (28th August) 143–152
Exhibit A, by Mr. Ruau:
Documents relating to the French Monetary system:
1. Declaration of the King, October 30, 1785 153–154
2. Law concerning the fabrication and verification of Coins of the 7–17 Germinal, An XI. of the French Republic 155–156
Exhibit B, by Mr. Ruau:
Synoptical table of French Coins 157
Journal of the seventh and last session (29th August) 159–169
Exhibit A:
Investigation into the Money circulation in France; amount, dates, origin, &c., of Coins found in the 19,511 offices of account of the Finance Department, on the evening of August 14, 1878 171–178
Exhibit B, by Mr. Pirmez:
Investigation into the Coin circulation of Belgium by the National Bank and by the Ministry of Finance, giving the proportions of Coin, according to their origin and their date 179–184
Exhibit C, by Count Rusconi:
Upon the authorization of Mr. Vrolik. Address of the Netherlands Society for the Progress of Industry, to the King of the Netherlands .. 185–189
Exhibit D, by Mr. Lardy:
Statement of the Monetary legislation and Coinage of Switzerland 190
Exhibit E, by Dr. Broch:
Statement of the Coinage and Fiduciary Circulation in the Scandinavian Kingdom 192
List of members of the Conference 195–199
Report of the United States Commission 201–216

APPENDIX.

Correspondence presented by Mr. Fenton 219–234
I. The Banking Systems in Europe 219
A. France 220
B. Germany 222
C. England 226
D. Holland 227
E. Belgium 228
II. The proposition of the Belgian Mint 232

Page.

Historical material for, and contributions to the study of monetary policy, selected and presented by Mr. Horton 235–878
Introductory 239
France 247–306
The ratio of 15½ in France 249
The recoinage of 1785, De Calonne 254
Statement of the recoinage of the Gold Coins 256
The monetary commission of 1790, De Fortbonnais and Desrotours 268
The Coinage system proposed by Mirabeau 297
Report of M. Gaudin, 1803 300
Conclusions 306
England 307–413
Statutes establishing free and gratuitous Coinage of Gold and Silver, 1666–1768 309
The debate and legislation of 1717, and the advice of Newton 315
Extract from the writings of Sir James Steuart, illustrating the monetary situation of England, 1759–1773 323
Measures for maintaining the Coin at standard weight, 1774 329
The amount of Silver coined in England in the eighteenth century 337
The aim of England's monetary legislation, 1773–1799 339
Prohibition of the Coinage of Silver (Statutes) 1798–99 345
The Bullion Report of 1810, and the Silver question; Introductory 351
Extracts from the report 364
The statute of 1816, which completed the Gold Standard 373
The effects of resumption in Gold by contraction of paper issues 1818, 1822 379
Extract from a speech of Hon. R. Lowe, August 6, 1869 381
Extract from a report of the Association of the Chambers of Commerce of the United Kingdom, 1870 383
The rise in the value of Gold in England 385
Extract from an article by Prof. J. Thorold Rogers 387
Extract from a paper on the recent fall of prices of commodities by Robert Giffen 389
Extract from return East India Silver; the limitation of the Coinage of rupees in India 409
The United States 415–697
Statutes, Resolutions, and Reports concerning Metallic Money, 1775–1789. 417
Extracts from the Journal of the Continental Congress, 1775–1776 417
Report of Committee to ascertain the value of the several species of Gold and Silver current in the Colonies and their proportion to Spanish milled dollars, 1776 421
Extracts from Journal of Congress, 1777–1782: Resolution concerning rates of money exchange; prisoners' supplies; state of the finances; rates of foreign coins 423
Coinage scheme proposed by Robert Morris, January 15, 1782 425
Report of committee of Congress thereon 432
Ordinance proposed for the valuation of foreign coins by Robert Morris, with reports and resolutions thereon, 1782–1785 433
Mr. Jefferson's notes on the establishment of a Money Unit and of a Coinage for the United States, with report of Grand Committee thereon 437
Abstract of the Coinage Systems proposed by Samuel Osgood and Walter Livingston, the Board of Treasury, in their report of April 8, 1786, and resolution of Congress thereon, etc 449
Ordinance for the establishment of a Mint, October 16, 1786 452

Page.

Historical material contributed by Mr. Horton—Continued.
Report of Alexander Hamilton on the Establishment of a Mint, April 28, 1791 454
Extract from Report upon Weights and Measures, by John Quincy Adams, 1821 487

Discussions preliminary to the alteration of the ratio 502–697

Memorandum of a report of a Committee of the House (Mr. Lowndes) on the expediency of amending the coinage laws, January 26, 1819 502
Report of William H. Crawford, the Secretary of the Treasury, on the Currency, February 12, 1820 502
Report of the Committee on the Currency on the expediency of increasing the relative value of Gold, February 2, 1821 554
Report of S. D. Ingham, the Secretary of the Treasury, respecting the relative value of Gold and Silver, etc., May 4, 1830 558
Extracts from the reports of Mr. C. P. White, from the select committee of the House on Coins, etc., 1831–'32 673
Extract from a report of Samuel Moore, Director of the Mint, on relative value of Gold and Silver 678
Memorial to Congress of sundry banks of New York, 1834 679
Motives for the adoption of the ratio of 16, 1834–'37 685
Mr. Benton on the revival of the Gold Currency 691
Miscellaneous Papers 699–735
The Rise of the Silver-price of Gold between 1770 and 1830, and its causes 701
Free Coinage and Gratuitous Coinage in France and England 711
The concurrent circulation of the two metals in France, ratios of 14½ and 15½ 715
Monetary propositions of Sir James Steuart 719
The theory of Monometallism in 1802; extracts from the second Report of Citizen Berenger 723
The German commercial convention 727
The sale of Silver and the stock on hand in Germany 729
The Anti-Silver Legislation of European States 733
A Partial List of Modern Publications on the Subject of Money 737–773
The Position of Law in the Doctrine of Money. (Note) 741
Monetary Union 775–801
A List of Monetary Treaties; Treaties for Interchangeable Currency .. 777
The Origin of the Monetary Union, called "Latin"; Report of the French Minister of Finance of 18th April, 1866 781
The treaty constituting the Latin Union, December 23, 1865 787
Extract from the report of the Committee on Coinage, Weights and Measures, by Jno. A. Kasson, 1866 791
The invitations of France to the United States to accede to the Latin Union, and to take part in the Conference of 1867 795
Proceedings of the International Monetary Conference of 1867 803–878

JOURNAL.

FIRST SESSION.

SATURDAY, *August* 10, 1878.

The Delegates of Austria-Hungary, Belgium, France, Italy, the Netherlands, Russia, Sweden and Norway, Switzerland, and of the United States of America, met at the Ministry of Foreign Affairs in Paris, France, at 1.30 p. m. on the 10th of August.

There were present:

For Austria-Hungary—Mr. VON HENGELMÜLLER.
For Belgium.—Mr. PIRMEZ.
Mr. GARNIER.
For France.—Mr. LÉON SAY.
Mr. CHARLES JAGERSCHMIDT.
Mr. RUAU.
For Italy.—COUNT RUSCONI.
Mr. BARALIS.
Mr. RESSMAN.
For the Netherlands.—Mr. MEES.
For Russia.—Mr. DE THOERNER.
For Sweden and Norway.—Dr. WAERN.
Dr. BROCH.
For Switzerland.—Mr. LARDY.
For the United States of America.—Mr. FENTON.
Mr. GROESBECK.
Mr. WALKER.

* Messrs. GOSCHEN, GIBBS, SECCOMBE, DELYANNI, FEER-HERZOG, HORTON, GURDON, were first present at the second session; Mr. VON KUEFSTEIN at the fourth session, and

Upon the motion of Mr. FENTON, who called the Conference to order, Mr. LÉON SAY, the French Minister of Finance, was chosen President.

Upon taking the chair, and after he had cordially welcomed the Delegates from the other nations in the name of the French Government, Mr. SAY thanked his colleagues for the honor which they had conferred upon him in choosing him to preside over their deliberations. The studies upon which the Conference was about to enter from a practical standpoint, relating as they did to difficult and much-debated problems, would certainly not fail, he said, to contribute to the advancement of economic science, and he was proud, for his own part, to be called to take part in them among gentlemen so distinguished for their experience and their intelligence.

Upon motion of Mr. Léon Say, Mr. FENTON, Chairman of the United States Commission, was made the Vice-President of the Conference.

Mr. ERNEST CRAMPON, a Consul of France of the first class, and Mr. HENRI JAGERSCHMIDT, *Auditeur* at the Council of State and Secretary of the Minister of Finance, were appointed Secretaries of the Conference.

The Conference being thus organized for the transaction of business, the PRESIDENT, Mr. Léon Say, spoke as follows:

You are aware, Gentlemen, for what reason this Conference is convened, and what object the United States of America proposed to the Conference in taking the initiative of calling it together. You are also aware under what circumstances the five states which compose the Latin Union, and which have the Double Standard, have thought best, while preserving to Silver its Legal Tender quality, to restrict its Coinage within narrow limits, and, within the past year, to suspend it entirely.

The adoption by Germany of the Single Standard of Gold, coinciding with a superabundant production of the American Silver mines, was a cause of inconvenience, and a source of possibly serious embarassment to the Latin Union, against which they felt that they ought to take measures to protect themselves.

Germany found herself in possession of a large mass of Silver to sell, the disposal of which she was able to effect with greater or less rapidity. In what measure is this operation already accomplished, and how much influence has it exercised in the depreciation of that metal? This is a question which it was not easy to understand in advance, and which cannot be answered with accuracy even to-day.

Mr. VROLIK, detained by illness, took part only in authorizing the presentation of an exhibit at the seventh session.

To avoid repetition, the statement given in the French at the commencement of the Journals of the official position of members of the Conference is relegated to a List of Members of the Conference which follows the Journal, in compliance with an announcement made in the Report of the Commission.

England, whose Monetary System in Europe rests upon the Gold Standard, and in Asia upon the Silver Standard, had herself become sensible of the difficulties which threatened to affect, or which had already affected, the Money Market, and at the close of an investigation made under the direction of the eminent Mr. Goschen, this conclusion was reached—that the causes of the depreciation of Silver could not be clearly understood until Germany should have completed to the full measure of her intention the sale of her stock of Silver. It is in the presence of such doubts and of such contingencies that the Latin Union, as a measure of prudence, has remained in an expectant attitude.

In the meantime the United States of America have adopted the policy of returning to the system of the Double Standard, adopting also as in the past their ratio of 1 to 16, instead of 1 to 15½, which is the relation of the two Money Metals in the Latin Union; they have recommenced the Coinage of Silver dollars, but in limited quantity, and have decided in Congress that the Cabinet at Washington should be invited to come to an understanding with the other Governments to devise means of establishing internationally a fixed ratio, the same in all the countries, between the value of Gold and Silver Coins.

These, Gentlemen, are the causes of our meeting.

Such being the origin of the Conference, it seems to me that we might ask the gentlemen from the United States to have the goodness to make known to us the intentions and views of their government; we shall thus gain from their communication a programme, or, if it seems best, a series of questions, upon which the order of our further discussions may be based.

THE PRESIDENT, Mr. Say, then called upon the Chairman of the United States Commission, Mr. FENTON, who spoke as follows:

MR. PRESIDENT AND GENTLEMEN: As the representatives of some of the countries which have accepted an invitation to this Conference have not yet arrived, we wish to say very little more at this first meeting than to thank you, Mr. President, for your words of welcome.

The Government of the United States, however, having asked the Governments of Europe to join in conference, its representatives desire, at the outset, to express the acknowledgments of their country to the nations which have so cordially responded to its invitation. We not only recognize the courtesy and the regard for the common interests of the great family of nations which have inspired your assembling, but we also appreciate the hopefulness imparted to this gracious response by the selection of so distinguished a body of gentlemen to consider the important subject intrusted to our deliberations.

It is a happy circumstance that, in the liberal spirit of our age, governments and peoples can unite, not merely to preserve peace, but to cultivate its arts and promote its industries. We meet while Europe is yet celebrating there cent victories of peace, and while this stately

capital witnesses the noble display of the world's progress. It is with real pleasure that the representatives of the United States congratulate you upon the assembling of the Conference, amid these auspicious surroundings, to undertake a work so closely affecting the common interests of the nations.

It marks the beneficent advance of civilization that the commercial relations of different countries grow nearer and firmer year by year. Thus we come to see more clearly the community of interests among nations, and are wisely prompted to cultivate more and more friendly intercourse. Among the measures to this end, we cannot be insensible to the benefits which would flow from a uniform basis as to international coin-metal exchanges.

The experience of mankind has confirmed the employment of the two precious metals as the Money of the world, and in the long records of time both have played honorable parts in the grand economy of material development. They have been faithful servants. It seems to us, speaking for our government, better to try and hold them both, despite the fact that they do not always pull evenly together. In this respect, the lessons of history point equally to the importance and success of general co-operation, for we find that in the long run the equilibrium has been well kept. Whatever the ebb and flow of the varying metal currents, and however widely policies may now and then have differed, there will be no dissent from the statement that the two Money Metals must remain associated, as far as we can see, in greater or less proportions in the financial systems of civilization.

We are here to consider, and we respectfully invoke your wisdom to the end, that their relative values may become practically fixed and stable, and that both may receive the free use which comes from international acceptance upon a common basis.

Without anticipating your discussion, it is but an expression of the distinct object of the Conference, as indicated by the law under which the representatives of the United States are commissioned to meet you, that we will be able to agree upon "*a common ratio between Gold and Silver, for the purpose of establishing, internationally, the use of Bimetallic Money, and securing fixity of relative value between those two metals.*" The specific means of attaining this object, we trust, will soon be developed in the discussion and comparison of views which is to follow.

We congratulate ourselves upon your co-operation to this end, feeling that no problem of economic science, and especially none looking to the common weal of nations, is too great for practical statesmanship.

THE PRESIDENT (Mr. Say) was of the opinion that before entering into the discussion of the measures proposed by the American Government concerning the international establishment of an identical and fixed ratio between the value of the two metals, which would immediately give rise in the midst of the Conference to absolute contradictions among

the various systems, and would perhaps tend to delay the discussion before all the members had been heard, it would be of advantage if the Conference should occupy itself primarily to ascertain the facts which are considered as having an influence on such a ratio, and that they should, first of all, obtain a knowledge as exact and thorough as possible of all matters pertaining to the general monetary situation. It would naturally be necessary to that end that the Delegates should, by placing them upon the table, communicate to each other such official documents or statistics as they possessed concerning the subject under discussion. A body of information would thus be formed with which each one might familiarize himself, and those of the documents which, in small compass, offered most points of interest, could, according to the usual custom, be printed as Exhibits of the Journal.

COUNT RUSCONI asked whether it would not be more logical to first decide whether such a fixed ratio was possible, before studying the documents and discussing the facts concerning its establishment.

THE PRESIDENT (Mr. Say) observed that monetary questions were, without exception, practical questions, and should, in his opinion, not only not be decided, but not even approached and discussed, except after the study of the facts and of their relations. The question of the possible existence of a fixed and permanent international ratio, although a question of principle, implied also a knowledge of the facts which might either maintain or change such ratio. The arguments on both sides of the question would possess more value if they accorded with correct and well-established facts, than if presented in the beginning in a form purely academic and in accordance with a preconceived opinion.

MR. LARDY thought it would be impossible to enter into discussion upon any point before the arrival of the English delegates, who represented the Single Gold Standard. For his part, he thought it better to pause for a time, until the official documents upon the monetary situation had been received—some representing the English, some the Belgian, some the Austrian investigation of the subject; also the record of the discussions on the question in the American Congress, &c.

As the result of these various observations, the Conference adopted the plan proposed by the President, and adjourned until Friday for the second session, and it was understood that, in the mean time, the Delegates from the various states would provide themselves with documents and statistics relating to the monetary condition of their respective states, and, as far as possible, with statements concerning the monetary affairs of states not represented, and would furnish the same to the Conference.

MR. BROCH, entering at once into the views and wishes of the Conference, asked permission to place upon the table a statement concerning—

I. The variations in the ratio of Gold and Silver since the Middle Ages.

II. A comparison of Gold Coins.

III. A schedule of various Coins which have already been proposed to serve as a universal Money.

THE PRESIDENT (Mr. Say) thanked Dr. Broch for his interesting communication, and the Conference decided upon its insertion in the Journal. (Exhibit A.)

MR. RUAU placed upon the table a diagram showing the monthly variations in the quotations of Silver in the London market from 1873 to 1878.

(Exhibit B.)

MR. LARDY expressed the regret of Mr. Feer-Herzog, who was detained at Bern by urgent duties in the National Council, that he was unable to be present and participate in the first session.

Upon the suggestion of Mr. GROESBECK, it was understood that the Journals of the Conference being as usual in French, the Conference should so proceed in its discussions, that any declaration or observation made in the course of the session might be immediately translated, either *viva voce* or in writing, for whoever should demand it; and that these translations should be made at once by some person of confidence, whom the Delegates of the different States should have the right to introduce, each on its own account, in the Hall of the Conference.

The session closed at 3½ o'clock.

EXHIBITS OF THE FIRST SESSION.

EXHIBIT A.

CERTAIN FIGURES USEFUL IN THE STUDY OF THE MONETARY QUESTION.

BY DR. O. J. BROCH.

I.—Relation between the price of Gold and that of Silver.

London is now the great market of the world for Gold and Silver.

The price of Silver is there expressed in pence by the ounce of Silver of the fineness of $\frac{37}{40}$ ("Standard Silver").

The relation between the price of pure Gold and of pure Silver, or between Gold and Silver of the same fineness, may be found by dividing the number 943 by the number of pence paid per ounce "Standard Silver."

Thus if the price of an ounce of Silver $\frac{37}{40}$ fine is noted at $55\frac{1}{2}d.$, the relation of Gold to Silver is $\frac{943}{55\frac{1}{2}} = 16.991$.

According to the Coinage laws of Great Britain, 1869 sovereigns or pounds sterling are to be struck out of 40 pounds troy of Gold $\frac{11}{12}$ fine.

The pound troy containing 12 ounces, it follows that the ounce of Gold $\frac{11}{12}$ fine, which is the Standard fineness of the Gold Coins, is worth $\frac{1869}{40\times12} = 3.\frac{429}{480}$ pounds sterling, or £3 17*s.* $10\frac{1}{2}d. = 934\frac{1}{2}d.$ Hence the ounce of pure Gold is worth $934\frac{1}{2} \times \frac{11}{12}$ pence.

On the other hand, if the ounce of Silver at $\frac{37}{40}$ fine ("Standard Silver") is worth x pence, the ounce of fine Silver will be worth $x \times \frac{40}{37}$ pence.

From this is deduced the relation of pure Gold to pure Silver, or what is the same thing between Gold and Silver of the same fineness.

$$\frac{934\frac{1}{2} \times \frac{11}{12}}{x \times \frac{40}{37}} = \frac{934\frac{1}{2} \times \frac{11}{12} \times \frac{37}{40}}{x} = \frac{942{,}995{,}454}{x},$$

or, with more than sufficient accuracy, $\frac{943}{x}$.

Thus in the price of "Standard Silver" on the London market—

62*d.*	corresponds to the ratio	15.210
61	"	15.459

60	corresponds to the ratio	15.716
59	"	15.983
58	"	16.259
57	"	16.544
56	"	16.839
55	"	17.145
54	"	17.463
53	"	17.792
52	"	18.135
51	"	18.490
50	"	18.860

In the Middle Ages the relation between the price of Gold and that of Silver was from 10½ to 12.

According to the various monetary laws this relation should have been—

In the year 1526,	in England	11.30
1542,	"	11.10
1551,	in Germany	11.17
1559,	"	11.45
1561,	in France	11.70
1575,	"	11.68

It was only after the discovery of the rich mines of Silver at Potosi in 1545, and still more after the invention of the method of cold amalgamation in 1557, that Silver began to fall as compared with Gold.

According to monetary laws the relation was—

In 1604,	in Great Britain	12.16
1612,	"	13.30
1619,	"	13.35
1640,	in France	13.51
1667,	in Germany	14.15
1669,	"	15.11
1670,	in Great Britain	14.50
1679,	in France	15.00
1685,	"	15.10

According to the exchanges quoted at Hamburg, with reference to Dutch Ducats, the relation of the price of Gold to that of Silver is calculated to have been from—

1687–1700,	average	14.97
1701–1720,	"	15.21
1721–1740,	"	15.08
1741–1790,	"	14.74
1791–1800,	"	15.42

In the XIXth century the relation between the price of Gold and that of Silver hsa been, in the London market, from—

1801–1810,	average	15.60
1811–1820,	"	15.51
1821–1830,	"	15.80
1831–1840,	"	15.97
1841–1850,	"	15.83

After the discovery, in 1848, of rich Gold beds in California and later in Australia, the relation between the price of Gold and that of Silver in the London market has been, from—

1850	average	15.70
1851,	"	15.46
1852,	"	15.59
1853,	"	15.33
1854,	"	15.33
1855,	"	15.36
1856,	"	15.33
1857,	"	15.29
1858,	"	15.36
1859,	"	15.21
1860,	"	15.27
1861,	"	15.50
1862,	"	15.35
1863,	"	15.38
1864,	"	15.35
1865,	"	15.46
1866,	"	15.41

After the discovery of the rich Silver mines in California, in Nevada, Arizona, and Colorado, in the United States, the price of Silver began to fall, and the fall was accelerated by the introduction of the Gold Standard in the place of the Silver Standard in Germany in 1872 and in the Scandinavian Countries in 1873.

The relation between the price of Gold and that of Silver in the London market was—

In 1867,	average	15.57
1868,	"	15.60
1869,	"	15.60
1870,	"	15.58
1871,	"	15.58
1872,	"	15.63
1873,	"	15.92
1874,	"	16.17
1875,	"	16.58
1876,	"	17.48
1877,	"	17.01

The lowest price of Silver in relation to Gold was reached in July, 1876; the price of Silver $\frac{37}{40}$ fine had then fallen in London to 46$\frac{3}{4}$*d.* per ounce, a price which corresponds with the relation of 20.17 between the price of Gold and that of Silver of the same fineness.

The prices of late (about August 1, 1878) have ranged from 52$\frac{11}{16}$*d.* to 52$\frac{3}{4}$*d.* per ounce Standard corresponding to the relation of 17.90.

II.—*Comparative Table of Gold Coins.*

According to the fineness or proportion of alloy there are in the world two great systems of Gold Coins: that of the fineness of $\frac{11}{12}$, and that of the fineness of $\frac{9}{10}$.

Beside these, there are only Egypt, Mexico, and the Phillippine Islands which have coined Gold Coins of the fineness of $\frac{7}{8}$, and the Ducats of the Netherlands and of Austria, which are of the fineness of 0.983; but the ducats are not, properly speaking, Money—having no fixed relation to the Money of account.

The specific gravity of the Gold Coins at the fineness of $\frac{11}{12}$ is 17.49; that of the Coins at the fineness of $\frac{9}{10}$ is 17.165; and that of the Coins at the fineness of $\frac{7}{8}$ is 16.70.

Countries.	Principal Gold Coins.	Legal weight in grammes.	Weight of pure Gold.	Value in Gold francs.
COUNTRIES WHICH COIN AT $\frac{9}{10}$ FINE.				
Monetary Union called Latin:				
France, Belgium, Switzerland	Piece of 20 francs	6 $\frac{41}{129}$ grammes = 6.45161.	5.80645	20.00
Italy	Piece of 20 lires			
Greece	Piece of 20 drachmes			
Roumania	Piece of 20 leys			
Finland	Piece of 20 markaa			
Austria-Hungary	Piece of 8 gulden			
German Empire	Piece of 20 reichmark	7 $\frac{2}{9}\frac{3}{3}\frac{3}{3}$ grammes = 7.96495.	7.16846	24.6914
Scandinavian Monetary Union:				
Sweden, Norway, Denmark	Piece of 20 kroner	8 $\frac{4}{9}\frac{1}{0}\frac{1}{0}\frac{7}{0}$ grammes 8.96057.	8.06452	27.7778
Netherlands	Piece of 10 gulden	6.720	6.048	20.832
Spain	Piece of 25 pesetas	8 $\frac{2}{5}$ grammes = 8.06452.	7.25806	25.00
United States of America	$\frac{1}{2}$-eagle of 5 dollars	129 troy grains = 8.35906.	7.52316	25.9131
United States of Colombia	Piece of 5 pesos	8 $\frac{2}{5}$ grammes = 8.06452.	7.25806	25.00
United States of Venezuela	Piece of 5 vénézolanos			
Peru	Piece of 5 sols			
Chili	Doblon of 5 pesos	7.0265	6.8638	23.6422
Japan	Piece of 5 yen	8 $\frac{1}{2}$ grammes	7.500	25.8333
COUNTRIES WHICH COIN AT $\frac{11}{12}$ FINE.				
Great Britain and Ireland	Sovereign of 20 shillings.	123 $\frac{27}{91}$ troy grains = 7.98815.	7.32239	25.2215
English India	$\frac{1}{2}$-mohur of 10 rupees	7.776	7.128	24.552
Portugal	$\frac{1}{2}$-crown of 5 milreis	8.8675	8.1285	27.9983
Russia	$\frac{1}{2}$-impérial of 5 roubles	6.545	5.9996	20.6652
Ottoman Empire	Livre turque of 100 piastres.	7.2164	6.615	22.7851
Persian Empire	Thoman of 100 shahis	3.760	3.4467	11.87
Brazil	Piece of 10 milreis	8.9045	8.27746	28.3046
COUNTRIES WHICH COIN AT $\frac{7}{8}$ FINE.				
Egypt	Piece of 100 piastres	8.544	7.476	25.75
Mexico	Piece of 5 pesos	8.460	7.4025	25.50

TABLE III.—*Gold Coins proposed as universal Money.*

Countries.	Gold Coins $\frac{9}{10}$ fine, of the value—		
	100 francs. Weight, 32 $\frac{2}{9}\frac{5}{1}$ gr.	25 francs. Weight, 8 $\frac{1}{3}\frac{2}{1}$ gr.	20 francs. Weight, 6 $\frac{4}{1}\frac{1}{1}$ gr.
France, Belgium, Switzerland	100 francs	25 francs	20 francs.
Italy	100 lires	25 lires	20 lires.
Greece	100 drachmes	25 drachmes	20 drachmes.
Roumania	100 leys	25 leys	20 leys.
Finland	100 markaa	25 markaa	20 markaa.
Austria-Hungary	40 gulden	10 gulden	8 gulden.
German Empire	81 mark	20 M. 25 pf	16 M. 20 pf.
Sweden, Norway, Denmark	72 kroner	18 kroner	14 kr. 40 ore.
Netherlands	48 gulden	12 gulden	9 fl. 60 c.
Spain	100 pesetas	25 pesetas	20 pesetas.
United States of America	$19.29.5	$4.82.4	$3.86.
United States of Colombia	20 pesos	5 pesos	4 pesos.
United States of Venezuela	20 vénézolanos	5 vénézolanos	4 vénézolanos.
Peru	20 sols	5 sols	4 sols.
Japan	19 yen 35.5 sen	4 yen 83.9 sen	3 yen 87.1 sen.
Great Britain and Ireland	£3 19s. 3d. 57	19s. 9d. 89	15s. 10d. 31.
English India	40.73 rupees d'or	10.18 rupees d'or.	8.15 rupees d'or.
Portugal	17.858 reïs	4.464 reïs	3.572 reïs.
Russia	42 R. 19.5 K. d'or.	6 R. 4.9 K	4 R. 84 K.
Ottoman Empire	438.9 piastres	109.7 piastres	87.78 piastres.
Persian Empire	8 thoman 42.3 sh	2 T. 10.6 sh	1 T. 68.5 sh.
Brazil	35.287 reïs	8.822 reïs	7.057 reïs.
Egypt	388.34 piastres	97.085 piastres	77.668 piastres.
Mexico	19.61 pesos	4.90 pesos	3.92 pesos.

TABLE III—*Gold Coins proposed as universal Money.*

Countries.	Gold Coin $\frac{9}{10}$ fine, weighing—	
	10 grammes.	5 grammes.
France, Belgium, Switzerland	31 francs	24 fr. 80 c.
Italy	31 lires	24 L. 80.
Greece	31 drachmes	24 D 80.
Roumania	31 leys	24 L 80.
Finland	31 markaa	24 M. 80 penny.
Austria-Hungary	12 fl. 40 kr	9 fl. 92 kr.
German Empire	25 M. 11 pf	20 M. 08.8 pf.
Sweden, Norway, Denmark	22 kr. 32 ö	17 kr. 85.6 ö.
Netherlands	14 fl. 88 c	11 fl. 90.4 c.
Spain	31 pesetas	24 p. 80.
United States of America	$ 5.98.2 c	$4.78.5 c.
United States of Colombia	6 p. 20	4 p. 96.
United States of Venezuela	6 v. 20 c	4 v. 96 c.
Peru	6 s. 20	4 s. 96.
Japan	6 yen	4 yen 80 sen.
Great Britain and Ireland	£ 1. 4s 7d	19s 8d.
English India	12.63 rupees	10.10 rupees.
Portugal	5.536 reïs	4.429 reïs.
Russia	70 R 50 k	6 roubles.
Ottoman Empire	136.1 piastres	108.8 piastres.
Persian Empire	2 T. 61 sh	2 T. 09 sh.
Brazil	10.939 reïs	8.751 reïs.
Egypt	120.39 piastres	96.31 piastres.
Mexico	6.08 pesos	4.86 pesos.

Mr. Sherman, as Senator of the United States, proposed as an International Coin a piece of Gold of 125$\frac{5}{8}$ troy grains, $\frac{9}{10}$ fine; it will weigh 8.135868 grammes, and will contain 7.322281 grammes of fine Gold.

It will be in fact the English sovereign recoined at the fineness of $\frac{9}{10}$; it will only differ from it by $\frac{1}{30}$ of an English penny.

Mr. Sherman proposes to accept it as $5, although in comparison with the American eagle of $10 it is only worth $4.8665.

This Coin or the pound sterling will have the value of—

France, Belgium, Switzerland	25 francs 22, 1 c.
Italy	25 lires 22, 1 c.
Greece	25 dr. 22, 1 c.
Roumania	25 leys 22, 1 c.
Finland	25 markas 22, 1 penny
Austria-Hungary	10 gulden 08, 8 kr.
German Empire	20 mark 42, 9 pf.
Sweden, Norway, Denmark	18 kr. 15, 9 öre.
Netherlands	12 fl. 10, 6 c.
Spain	25, 22 pesetas.
United States of America, present coinage	$4.86, 65 c.
United States of America, in coinage proposed	$5.
United States of Colombia	5 pesos 04, 4.
United States of Venezuela	5 vénézolanos 04, 4.
Peru	5 sols 04, 4.
Japan	4 yen 88, 15 sen.
Great Britain and Ireland	£1.
English India	10, 27 rupees.
Portugal	4, 504 reïs.
Russia	6 R. 10, 3 k.
Ottoman Empire	110.65 piastres.
Persian Empire	2 T. 12 shahis.
Brazil	8.900 reïs.
Egypt	97 piastres 94.
Mexico	4 pesos 95.

DIAGRAM

SHOWING THE

QUOTATIONS OF SILVER IN THE LONDON MARKET

FROM JANUARY, 1873, TO JULY, 1878.

EXHIBIT B.

DIAGRAM

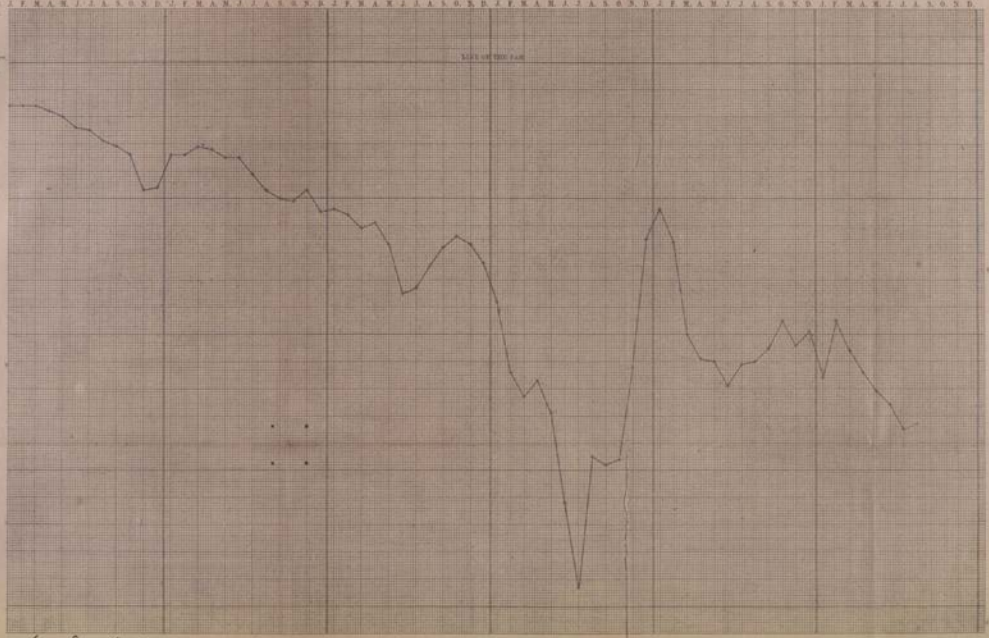
SHOWING THE

QUOTATIONS OF THE GOLD PRICE OF SILVER IN LONDON,

From January, 1873, to 1878.

(MONTHLY AVERAGES.)

The months are shown by the horizontal lines—the prices by the vertical lines.


ADMINISTRATION OF MONEY AND MEDALS
YEARS
1873
1874
1875
1876
1877
1878
MONTHS
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
PRICE IN GOLD.
LET US TRY FAIR
PAR.

Sen. Ex. Doc. No. 58

SECOND SESSION.

SECOND SESSION.

FRIDAY, *August* 16, 1878.

There were present:

The Delegates of—

Austria-Hungary,
Belgium,
France,
Italy,
The Netherlands,
Russia,
Sweden and Norway,
Switzerland, and of
The United States of America,

who assisted at the first session; and, for—

Great Britain—Right Hon. GEORGE J. GOSCHEN,
Mr. HENRY HUCKS GIBBS,
Sir THOMAS L. SECCOMBE.
For Greece—Mr. DELYANNI.
For Switzerland—Mr. C. FEER-HERZOG.

The session was opened at half past one p. m.

The minutes of the first session having been read and confirmed,

MR. FENTON introduced to the Conference Mr. S. DANA HORTON, whom the Congress had adjoined to the American Delegation, and requested that he be admitted to the Conference on the same footing as Mr. Groesbeck, General Walker, and himself. In making this request he was acting at the instance of the Government of the United States.

THE PRESIDENT (Mr. Say) took official notice of the desire expressed by Mr. Fenton, and congratulated himself upon the assistance which, on account of his special knowledge, Mr. Horton would be enabled to lend to the labors of the Conference.

MR. WILLIAM BRAMPTON GURDON, who had been adjoined to the English Delegation by the Government of Her Britannic Majesty, was likewise invited to take his seat.

MR. GOSCHEN laid upon the table the printed report of the Inquiry made in England in 1876 into the Depreciation of Silver, and a manuscript note on the Currency Systems of the various parts of the British Empire. The Conference decides that this second document be annexed to the Journal.—(Exhibit A, second session.)

MR. MEES presented a note on the Monetary Legislation of the Netherlands.—(Exhibit B, second session.)

MR. LARDY presented a collection of all the legislative or international documents concerning the Monetary System of the Swiss Confederation.

MR. FENTON laid upon the table documents and memoranda bearing on the monetary question, and offered, if desired, to submit the Statutes at Large of the United States. Reference, however, to those laws, and a brief statement of their import, could be found in the volume recently published by Dr. Linderman, Superintendent of the United States Mint. A list of these works was then laid upon the table by Mr. Fenton.—(Exhibit C, second session.)

MR. BROCH explained in what manner and for what reasons the Government of Sweden and Norway came to decide to take part in the Conference. If the Conference had necessarily had for its exclusive object, as the public had at first been induced to suppose, the relation to be established between Gold and Silver, it was clear that for the Scandinavian States, as for all states which have a Single Standard, this question could offer no practical utility; but when it was subsequently understood that, in the view of the Government of the United States, the Conference was to treat of more general questions, and that the Government of the United States was even favorable to the creation of a Coin of universal circulation, it became evident that the Scandinavian countries need no longer abstain from taking part. On the field of discussion thus enlarged their place was marked. In any case the resolution to take part in the Conference was not formed until it was understood in Sweden and Norway to what extent and under what reservations England herself had resolved to participate in it.

By a letter addressed to Count Piper, Minister of His Majesty, the

King of Sweden and Norway, at London, his colleague of the United States wrote to him of date July 1, 1878:

JULY 1, 1878.

MY DEAR COLLEAGUE: Having had the invitation for the bi-metallic Conference widened so as to include the consideration of the Coins of the various countries with reference to a universal currency, the British Government has determined to send Delegates with the understanding that in doing so it does not commit itself to any conclusions which may be reached. * * *

(*Signed*) WELSH.

To COUNT PIPER,
Minister for Sweden and Norway at London.

It is precisely under the same conditions, and under the same reservations, that the Delegates of Sweden and Norway have been sent here. We have no authority, Mr. Broch added, to make any engagement to bind our country, but we trust that the questions proposed in the Conference will enable us to make our views known.

MR. FENTON announced that in order to respond to a desire expressed by various members of the Conference, the American Delegates had decided among themselves that in to-day's session Mr. Groesbeck should develop the views of the Government of the United States, and formulate the questions upon which the Conference might be called upon to pronounce itself.

MR. GROESBECK stated that the United States had no wish to be intrusive, but rather to co-operate with the other states in a common policy. It having been suggested, however, that the United States as the promoter of the Conference would be expected to explain the object of calling the Delegates together, he rose to explain the reasons of the invitation.

The object of the Conference was to restore Silver to its former position; to equalize Gold and Silver upon a ratio to be fixed by agreement. This, said Mr. Groesbeck, is the principal object of the Conference. I desire, however, to say in addition, speaking in the name of my colleagues, that we shall be happy to come to an understanding with the Delegates of Sweden and Norway, and of all other States interested in the establishment of a coin of universal circulation.

For the rest, Mr. Groesbeck desired that it should be clearly understood that upon no question had the American Delegates the power to bind their country. We are charged, he said, with elucidating or solving with you a problem of political economy, and if at the close of our investigations we agree upon any solution, it will be our duty to make report of it to our government—a report the conclusions of which transformed into a bill can be voted upon and adopted by Congress alone. The task which has been confided to us is, therefore, the same as your own. It is held within the same limits.

Entering then upon the financial situation of the United States, Mr. Groesbeck expressed the firm and unshakable determination of his

country to place itself at the date appointed, that is to say, on the 1st of January, 1879, in the position of a specie-paying State.

The law was precise; it would be executed on the day appointed. A letter of the Secretary of the Treasury, which he would read if it were necessary, affirmed this with authority. If, then, said Mr. Groesbeck, we agree upon a measure of common interest, the United States, before the delays inevitable in the discussion of such a question are at an end, will have become, on the 1st of January next, a specie-paying Nation; we shall have effectually acquired, you may be sure, the ability to take our full share in executing any engagement we may enter into.

MR. GROESBECK then directed attention to an error, a prejudice, which it appeared had found its way to many minds. It was said that the United States had taken the initiative in the Conference because they were a Silver-producing country, and that they had as a State peculiar interest in the monetary question. This was not correct. The United States as a State had no interest in the working either of Silver or of Gold mines. They had no more interest in them than in the carrying on of this or that branch of agriculture or manufactures. The government had no royalty in these mines, and realized absolutely no profit from them. They did not even raise taxes out of this product. These mines and their product were entirely the property of the private persons, native or stranger, who had bought them. Each separate State, the State of Nevada, the State of California, imposed a tax upon the soil in which were these mines just as they did on arable land or other kind of real property within their borders, but there was nothing taken out of the product which was drawn from them. So true is this, said Mr. Groesbeck, that since the remonetization of Silver the government has found itself compelled to buy as much Silver in the London market as in America.

And besides, were the United States, he asked, as great producers of Silver as had been represented? Here was another error which he also desired to rectify. In the last quarter of a century the yield of Gold mines in the United States had been four times as great as that of the Silver mines. The yield of the Gold mines had, it was true, decreased, and that of the Silver mines increased in enormous proportions. But it was well that it should be understood that in the great Comstock lode, which was the most productive of all, such a depth had now been reached that the time was near when the working would have to be suspended, unless it should be extremely remunerative. Now, geologists and other persons of experience had observed that the argentiferous veins, or lodes, in many of the mines of Nevada had shown a tendency to become narrower as they descend, a fact which gave a prospect of a gradual decrease of the production of silver. Of the total amount produced in the last year, $39,000,000, Nevada had furnished $26,000,000. There remained $13,000,000 for all the other mines. It was plain to what extent the yield of Silver would be restricted in the United States

when Nevada should come to make the default which was now anticipated.

The remonetization of Silver is, therefore, in no sense an enterprise undertaken by the United States selfishly, with a view to private profit; nor is it a new undertaking. They have been in the use of the two metals from the time the government was organized. It is no new system which they propose to establish; it is the old system, that under which they have long lived and prospered, to which they are returning. From 1792 to the day when, by a sort of inadvertence, in 1873, the Silver Standard was suppressed, not a merchant, not a banker, not a manufacturer, not an establishment, nor an interest of any kind, could be cited as having raised any objection to the simultaneous use of the two metals. Bi-metallism is, therefore, in the United States not only a tradition of the law, but has entered deeply into the habits of the people.

From this double point of view Mr. Groesbeck then presented a short historical *rĕsumé* of American legislation.

It was in 1792 that the first coinage law was passed, and by this law the ratio between the two metals was fixed at 1 to 15. At this epoch neither France nor her monetary allies of to-day had yet established the relation of 1 to 15½. In 1834–7 the ratio had been changed; in place of the ratio of 1 to 15 the United States had adopted the ratio of 1 to 15.98, or, to use the common expression, 1 to 16. This ratio was maintained until 1873. Notwithstanding, in these varying phases of our monetary history, the Silver dollar has never been touched. The Gold coins have been changed, but the Silver dollar has remained such as it was in the first days of the Republic.

It can, therefore, be said that the United States from their foundation to the present day have always had the same Silver Money. The coin whose restoration was decided upon in 1878 is not a new coin; it is an ancient coin to which we are returning because it embodies an ancient, favorite policy.

In 1873, in a law which did not very accurately carry out its purpose, Silver was made to disappear through inadvertence rather than intentionally, by an omission to say anything about it. As a matter of fact the Silver Standard was found to have been suppressed. The example of Germany had proved contagious; no newspaper had discussed the question; public opinion, by no means enlightened, was, so to speak, taken unawares, and great surprise was felt when, a short time after the law was passed, the change was fully perceived.

In 1878, the legislator, better advised, desired to re-establish in its integrity the traditional money system of the United States; he put Silver upon the footing of equality with Gold, and, in order the better to secure for the future the simultaneous use of the two metals, brought about the convocation of this Conference. The law which has been passed this year is the due expression of public opinion. In voting it

Congress has shown itself, let it be well understood, the faithful interpreter of the sentiments and of the wishes of the American people. Never has a law so important been passed by a majority so great as that which passed the law remonetizing Silver.

If, added Mr. Groesbeck, contrary to our intention, which was to treat the two metals on the footing of perfect equality, we have nevertheless limited the coinage of Silver, this was on our side a mere measure of precaution adopted provisionally on account of the condition of the market of the metals in Europe and of the measures taken by the States of the Latin Union.

This restriction was in a manner imposed upon us by circumstances; but the Conference will not lose sight of the fact that, although limiting the coinage of Silver, the American Legislature decided, in article 2 of the bill, that the Executive should seek, in conference with other governments, the means by the aid of which the Coinage of Silver, like that of Gold, can in the future be rendered free.

MR. GROESBECK closed in proposing to the Conference to pronounce itself on the two following propositions:

I.

It is the opinion of this assemby that it is not to be desired that Silver should be excluded from free Coinage in Europe and the United States of America. On the contrary, the assembly believe that it is desirable that the unrestricted Coinage of Silver, and its use as Money of unlimited Legal Tender, should be retained where they exist, and, as far as practicable, restored where they have ceased to exist.

II.

The use of both Gold and Silver as unlimited Legal-Tender Money may be safely adopted: first, by equalizing them at a relation to be fixed by international agreement; and, secondly, by granting to each metal at the relation fixed equal terms of Coinage, making no discrimination between them.

MR. FENTON presented to the Conference the following translation of these propositions:

I.

La Conférence est d'avis qu'il n'est pas désirable que le métal argent soit exclu du libre monnayage en Europe et aux États-Unis d'Amérique Elle croit, au contraire, désirable que le libre monnayage de l'argent et son emploi comme monnaie légale ayant force libératoire illimitée, soient maintenus dans les pays où ils existent et, autant que cela pourra se faire, rétablis dans ceux où ils ont cessé d'exister.

II.

L'emploi simultané de l'or et de l'argent, comme monnaie légale ayant cours illimité, peut être assuré sans inconvénient:

1°. En les mettant sur un pied d'égalité au moyen d'un rapport à fixer par entente internationale.

2°. En adoptant pour chaque métal, d'après le rapport fixé, des conditions égales de frappe, sans qu'il soit fait entre eux aucune distinction.

THE PRESIDENT (Mr. Say) expressed thanks to Mr. Groesbeck for the explanations which he had given, and dwelt upon the interest which the Conference would feel in learning still more in detail the motives which had determined the United States to limit the Coinage of Silver Money.

MR. GOSCHEN expressed the desire to know precisely what signification was to be attached to the word "inadvertence," which Mr. Groesbeck made use of in saying that the demonetization of Silver in the United States in 1873 had been a surprise to the public.

MR. GROESBECK replied that by "inadvertence" he meant that the American people had never been asked whether they wished Silver to remain a Legal Tender; that no newspaper had called attention to the change, nor had any Chamber of Commerce or Board of Trade considered or recommended it. It occurred while the government was in a state of suspension, and when public attention was not sufficiently directed to the subject.

Later, when the measure produced results of which no notice had been given, and notably to take away from the country the use of a money to which it had been accustomed from the first day of its existence, public opinion showed itself justly disturbed.

The movement caused a searching investigation by the ablest minds, followed by protracted discussions in Congress and before the people. The result was that Silver was restored.

MR. GIBBS asked if this resolution was taken without preparatory debate in the Congress?

MR. GROESBECK recognized that there was some divergence of ideas, but thought he was right in insisting on the fact that a considerable number of members of Congress had confessed to him that, at the time the decision was made in 1873, they had not known what they were doing. As to the question proposed by the President, in relation to the limitation of Coinage, he believed he could affirm that the decision taken by the United States had been prompted by that of the States of the Latin Union. From the moment that the countries which had themselves maintained the Double Standard shut their gates to Silver, it became necessary, in order to maintain the equilibrium, not to open wide those of the American Union, but to hold back in order to obtain by international agreement the restoration of Free Coinage in all countries at the same time; and it was precisely this, added the American Delegate, which brought us here.

MR. FEER-HERZOG remarked that long before the Law of 1873 Silver had disappeared from circulation in the United States; the actual circulation consisted of Gold and Paper Money. During the long period of time of which Mr. Groesbeck spoke, from 1792 to 1873, there had only

been coined about eight millions of Silver dollars, while in the three or four months that had succeeded the passage of the Bland Bill an equal amount of these dollars had been coined.

As to what Mr. Groesbeck had said of the "inadvertence" in consequence of which the Law of 1873 had been passed, and of the surprise which the effects of this Law were supposed to have provoked in consequence, Mr. Feer-Herzog laid upon the table documents relating to the preliminary preparation of that Law—documents published by the Government of the United States. It appeared, he said, from these documents, that it was not by a mere accidental oversight, but voluntarily and with reflection that the suppression of the Silver Standard was determined upon. It was expressly stated that Gold was to be, in the future, the sole Monetary Standard of the United States, and that Silver should cease to be a Standard. (Exhibit D, second session.)

It is, therefore, said Mr. Feer-Herzog, difficult to admit that there was any inadvertence; and as for subsequent surprise, that seems hardly more admissible. Mr. Groesbeck has spoken of the re-establishment of Silver by the will of the people of the United States. But the practice of *plebiscites* is not known in the United States. The people, as a body, are never called upon to pass laws themselves, and there is no special argument against the Law of 1873 to be drawn from the fact that the people were not consulted at its adoption. This is the fate of all laws.

According to Mr. Feer-Herzog there was all the less reason for surprise at the effects of the Law, from the fact that the Law had brought about no change, or very little change, from the situation as it existed before the passage of the Law. The Law decided that Silver should no longer be legal Money; but before that, a long time ago, it had disappeared from the circulation. After the discovery of the mines of California, Silver had gradually been pushed out by Gold; after which the events of the war had brought about the forced currency of Paper Money. The Law of 1873 could not, therefore, have produced in the monetary situation, and in the habits of the American people, this great derangement of which Mr. Groesbeck had spoken. As far as related to the influence exerted by the decisions of the Latin Union concerning the limitation of the Coinage of Silver, upon the decision of the United States to the same effect, Mr. Feer-Herzog observed that the American Law of 1873 had been passed in April, at the time the fall of Silver began, while the Conference of the Latin Union, in which it was decided that the Coinage of 5-franc pieces should be restricted, did not meet till the close of the year. It seemed to him difficult to reconcile this plain comparison of dates with the point of view upon which the Hon. Mr. Groesbeck had placed himself.

GENERAL WALKER entered into explanations which showed not only that the attention of the people of the country was not called to the fact of the change being effected, but that it was unknown to men specially occupied with financial and monetary subjects. He himself, though he

had at the time been lecturing on Money, and occupied a chair of political economy, was not aware of what was being done, and he presumed the great majority of his fellow-citizens were equally ignorant.

MR. GOSCHEN thought it would be useful to ascertain whether, at the time the law had been passed, Silver was or was not falling.

MR. WÆRN recalled the fact that the adoption of the system of the Single Gold Standard by the States of the Scandinavian Union took place in May, 1873, and was caused by the fall of Silver.

MR. BROCH observed that the fall of Silver had begun to show itself about the month of November, 1872. According to the quotations, the relative price of the two metals was at that time 1 to 15.85. The fall was more marked in 1873, the average relation during the year being 15.91. It must not, however, be forgotten that at that time the legal relation of the metals in Coin was 1 to 16, and consequently Silver was still above par in the United States, although already depreciated as far as the States of the Latin Union were concerned, their bi-metallic system resting on the relation of 1 to 15½.

MR. GROESBECK, in reply to Mr. Feer-Herzog, explained that if up to 1834 there was only a small coinage of Silver, it was because Mexican dollars and Spanish dollars were used as well as some 5-franc pieces. Half and quarter dollars were, moreover, of the same purity as the dollar, and that likewise tended to restrict the coinage of dollars. Up to 1873 the American Silver dollar was at a premium, and the explanation given by the American authorities for the demonetization of Silver was that it was better to have gold, not on account of the relative value of that metal, but on account of other advantages which led to the preference.

MR. FEER-HERZOG argued that in 1873 the small quantity of Silver which may have remained in circulation was at a premium as compared with Paper, just as Gold was, but it could not be said that Silver was at a premium *per se;* it was only at a premium compared with Paper, and not as compared with Gold.

THE PRESIDENT (Mr. Say) insisted upon the question which he had stated at the opening of the Conference, namely: Why did not the United States, in restoring the Double Standard, permit the unlimited Coinage of Silver as well as that of Gold? It had been said by the Hon. Mr. Groesbeck that the restriction of the Coinage of Silver by the Latin Union had supplied a motive for the restriction in the United States; but this view did not seem to be well founded. It was by an amendment of the law that a limit was fixed to the Coinage of Silver dollars, and Mr. Say felt constrained to believe that this amendment was a mode of agreement, a compromise by means of which a majority could be obtained. The influence of the Latin Union seemed to have counted for so little in

the resolutions adopted by Congress on this occasion, that it does not appear that there was, even for a moment, any question of conforming the American system to that of the Latin Union, by the adoption of the relation of 1 to 15½.

MR. FEER-HERZOG supported the observations of the President, by calling attention to the fact that the bill in its original form permitted the Coinage of Silver without limit.

MR. GROESBECK said that the author of the bill could not foresee from the start all the changes and limitations the adoption of which the majority of the two Houses might in the course of the debates come to regard as proper. The general tendency and sentiment of the people in the United States are unequivocally favorable to the principle of unlimited coinage. It was at first desired to respond to this feeling of public opinion, but upon reflection it appeared that in such a matter it would be dangerous for one State to act alone, and a certain limit to coinage was therefore provisionally established.

MR. HORTON, in reply to the points raised by the President of the Conference, called attention to the fact that the majority report of the Commission appointed by Congress in 1876 to investigate the Silver question had recommended the adoption by the United States of the ratio of 1 to 15½ because it was the ratio of the Latin Union. The bill known as the Bland Bill had been proposed in Congress in the summer of 1876. Between that time and the passage of the law in pursuance of which the Conference met, the whole question had been thoroughly discussed in the United States in all its phases. In this discussion the situation of the Latin Union had not been lost sight of, but had peen made the subject of special attention.

After these explanations, no other member desiring to speak,

THE PRESIDENT (Mr. Say) observed that, in the memorandum presented by the American Delegation, two questions had been presented to the Conference; and he asked whether it was agreeable to the Conference to enter immediately upon the discussion of them, or whether it preferred to remit the consideration of them to the next session.

MR. FEER-HERZOG insisted that the discussion should be opened immediately, and that the Delegates be called upon to give their views successively, in alphabetical order.

THE PRESIDENT (Mr. Say) was of opinion that this mode of procedure would have the inconvenience of compelling each member to make a statement of principles. It would seem to him more satisfactory that those who demanded the floor should speak, either in support of, or to make their objections to, the propositions of the American Delegation.

The Conference adopting this mode of procedure,

The PRESIDENT (Mr. Say) requested one of the Secretaries to read the propositions of the Delegates of the United States.

MR. PIRMEZ desired to make some brief remarks upon the significance of the memorandum presented for discussion. It consisted, he observed, of various propositions, which, taken separately, might appear acceptable, but which it was, at the same time, necessary to view as a whole.

For example, there is certainly no reason to desire that Silver should everywhere be deprived of its function as Money, for which its nature renders it fit. So, likewise, if one considers whether, given a country with a monetary system based on Silver, it is desirable that the Coinage of Silver be free rather than controlled by the State, it is easy to admit that freedom is better than constraint.

But it is not in this isolated form that the propositions are presented to us. They are bound together and formulated in their relation to one point supposed to be admitted, namely, that what is demanded for Silver is already accorded to Gold. The proposition, therefore, amounts to saying that it is advantageous that Gold and Silver should be employed as Money simultaneously, and with equal freedom of Coinage. Now, this is the system of the two Money Standards in its full extent, and in order that there may be no doubt in this regard, the proposition demands for Silver, as it assumes for Gold, full Legal-Tender power. To declare that it is desirable that all countries adopt the system of the Two Standards, this is, in essence, the proposition upon which the debate opens.

MR. PIRMEZ declares that the country which he has the honor to represent cannot do otherwise than reject this proposition. The system of the Double Standard has the effect to organize monetary crises. At the present moment the removal of the restrictions to which the Double Standard is subjected, in those countries of the Latin Union which have a metallic circulation, would have for its immediate result to give enormous profits to speculators in the metals, by enabling them to withdraw Gold and replace it with Silver in the circulation.

COUNT RUSCONI saw no difficulty in the Conference pronouncing itself, in the first place, on the question of principle, namely: Is it possible to establish a fixed relation between Gold and Silver? This question of principle once settled, if it be decided affirmatively, the moment would have then arrived for an examination of the means to be employed to establish such a ratio. On the other side, does bi-metallism offer so many disadvantages that it can be said that mankind have made a mistake in the concurrent use of the two metals during the entire course of the ages? Must the world be divided into two camps absolutely separated from each other, and mankind be plunged into the unknown by the general adoption of a system of exclusion? The Delegate of the Italian Government was opposed to such a plan.

MR. BROCH explained how, in his view, the Double Standard was almost always an ill-regulated system. In reality, he said, there is never a Double Standard; one of the metals always outweighs the other, and leaves to the latter a merely secondary *rôle* in the circulation. It is a recognized law that the weaker metal drives out the stronger, so that, in fact, a country never keeps the Double Standard, but secures merely an alternative standard. Mr. Broch recognized that the United States had a great interest in having other countries make equal use of the two metals for their monetary circulation and give equally to both the Legal-Tender character.

The United States fear that if the States still subjected to the *régime* of Paper Money resume specie payments with the Single Gold Standard, this will immediately produce the double consequence of augmenting, in a high degree, the value of Gold and of depreciating that of products of every kind; a result which, from their point of view, as a great producing country, and as a great debtor State, would in fact present disadvantages. The United States have a heavy debt, and it must be admitted that a rise of Gold would, with one blow, aggravate the weight of this debt.

But Mr. Broch observed on the other hand that if, with the Double Standard, the unlimited Coinage of Silver be admitted, as the United States demand, it is also to be feared that everywhere the price of provisions and of the necessaries of life will be considerably increased; which is another evil, and a far more serious one than the one just mentioned, because it reaches not merely the proprietor and the producer, but the mass of consumers, the laborers, petty employés, functionaries, all those who receive wages or fixed incomes.

After the discovery of the mines of California and Australia, Gold fell; and, thereupon, in consequence of the necessity of paying in Asia, in Indo-China, and the East, for the raw textile materials for which Europe manifested an extraordinary demand, an upward movement in the value of Silver declared itself. That metal, at that time in great request, an object of search, commanded a premium; but this premium never exceeded 2 per cent. Now, on the contrary, the development of the Silver mines and the demonetization of Silver in Germany have brought about a fall in the value of Silver far greater and more permanent; a fall which, besides, is merely the continuation of the descending path of this metal through the centuries. In fact, said Mr. Broch, as one can easily be satisfied by casting his eye over the picture presented at the first session (Exhibit A, first session), Silver always goes on gradually losing its value, with the exception of a few moments of stoppage, or even an accidental rise. It seems to be its destiny to be always falling.

Mr. Broch maintained, further, that if a ratio between Gold and Silver should be adopted and fixed internationally, the oscillations which in spite

of this purely conventional relation, must take place in their real values, and the fluctuations of the metal in circulation, must cause frequent perturbations in foreign trade. In his view the system of the Single Gold Standard offered great advantages. Gold, said Mr. Broch, can be transported much more easily than Silver. The relation of weight is at present about 1 to 18; but the ratio of volume is 1 to 30. In Europe, and in a condition of our civilization like the present, Gold will, therefore, on account of its portability, have the preference for the ordinary uses of life as well as for trade, both foreign and domestic. With Gold, people who have the good sense to pay all their purchases in cash can easily gratify this propensity. A man can carry upon his person a considerable sum in Gold without inconvenience, while if one were reduced to paying everything in Silver, a lady could not go into a shop to buy a dress without taking with her a porter to carry the load of Silver which the purchase of this simple object would require to-day. Gold alone responds to the needs of an active circulation and of an advanced civilization; it is become the Money of all peoples that are progressing, while Silver remains exclusively the Money of peoples which are backward or stationary.

If, added Mr. Broch, the bi-metallic system by some impossible combination of circumstances should be extended in Europe, it would speedily bring about the disappearance of Gold, especially in small states; the slightest, even passing, oscillation in the value of the two metals would suffice to drain them completely of the metal commanding a premium.

Passing to another order of ideas, Mr. Broch affirmed that it was not so much the lack of currency as the organization of the banks and the deplorable condition of the finances of the different nations which was responsible for the fact that many of them were still subject to the *régime* of Paper Money. The United States thought that if Russia, Austria, and Italy should adopt the Single Gold Standard and resume specie payments, Gold would increase in value to a considerable extent, because they would require a great quantity of it. But, according to Mr. Broch, they would require infinitely less than was supposed. Experience, he said, has proved that in such a case the state which desires to replace its paper circulation with metal or convertible notes only requires for the operation a sum of metal equal to that given by the premium of Gold over the paper, say 10 per cent. of the value of the paper; on this subject Mr. Broch regarded the apprehension of the United States as chimerical.

The system of the Double Standard, which they praise, would have, in his view, another disadvantage. Even if all the states of Europe came to adopt it, as the United States demand, there would always be, outside of the system, great, nay, immense countries, such as China and India, which would remain attached by inveterate habit to the Single Standard of Silver; and the necessary relations of commerce between them and Europe, varying of necessity according to circumstances, would bring

about a continual fluctuation in the value of the two metals. At one time it would be necessary to export Silver when the balance of trade between Europe and the East was to be paid in Money to the latter. There would be then a premium on Silver and a drain upon the Token Money, indispensible to retail trade; but presently, if the balance of trade should be in favor of Europe, Silver would return to inundate the market of the metals in Europe and raise the value of Gold. Here would be an incessant cause of perturbations, for these fluctuations have to-day an importance which they have never had in the past. At no epoch has foreign trade assumed the proportions it has to-day. Commerce with the East, especially with India, with those great reservoirs of men where populations are numbered by hundreds of millions, can of itself cause, in a single year, considerable displacements of specie, while domestic commerce more generally finds at home and within itself its means of exchange.

Such are the numerous reasons which oppose the adoption of the propositions of the United States. But, added Mr. Broch, does this imply that the states which have not a metallic circulation would not do well to adopt the Double Standard as a transition measure, in order to attain later the Single Standard of Gold? Undoubtedly not; but such is not the meaning of the proposition of the United States. Their plan goes very much further. Mr. Broch remarked, in conclusion, that if Norway was enabled with ease, and, so to speak, at once, to establish the Single Standard of Gold, it was due to a sort of forced currency given to foreign Gold Coins, and also because the sum of metal required was inconsiderable.

MR. BARALIS observed that if Mr. Broch and the other Delegates who understood the English language had been able to understand the statement which had been made in English by Mr. Groesbeck, those among the Delegates who did not understand English were still at the present time incapacited from taking part in the discussion. It would, in his view, be proper, before engaging further in it, to wait till the translation of Mr. Groesbeck's speech had been distributed, according to the system which had been agreed upon at the first session.

THE PRESIDENT (Mr. Say) was likewise of opinion that the thorough discussion of the American propositions must be remitted to another session; but, without entering into the depths of the question, it appeared to be a good thing that gentlemen should touch upon it to-day. Still, if the Conference saw any inconvenience in prolonging this preliminary discussion, he declared himself ready to close the session.

MR. DE THOERNER was desirous of explaining clearly that all he should say in the Conference would be said in his own name, and without in any way committing his government to any opinion. The Russian Government, although feeling it necessary to reserve its decision

until the time of the resumption of specie payment, accepted the invitation to the Conference in part to respond to the desire of the American Government and in part with the hope of gathering precious material in the labors of an assembly in which so much intelligence and learning were united. Having made this statement, Mr. de Thoerner desired to cite two facts which proved how difficult it is in the matter of Money, by means of laws and conventional action, to produce an effect in opposition to natural forces.

In Russia, before Paper had expelled the Metallic Money, there was a sufficiently abundant circulation of Gold and Silver, although the Legal Standard was the Silver rouble. These two metals, being received alike in the public offices, had an equal Legal-Tender power in payment between individuals. And yet, notwithstanding this, the premium on Gold became so pronounced, that a half-imperial of five roubles was worth five roubles fifteen kopeks, a premium which was recognized by the government itself, and at that time the fluctuations of Silver were not what they have since been. In 1876 the depreciation of Silver became so great that Paper reached a premium of 5 per cent. above Silver, and the government was compelled to suspend the Coinage of Silver for the account of private persons, except in the case of the rouble destined for the China trade, and that, too, at a time when there was no metallic circulation. There are here said Mr. de Thoerner, facts which, in my view, prove how opposed it is to the very nature of things to endeavor to establish a fixed relation between the value of Gold and that of Silver.

MR. DE THOERNER also reserved the right to lay upon the table of the Conference a supplementary note, explaining the causes which led the Russian Government to suspend the Coinage of Silver roubles.

Mr. FEER-HERZOG said he would not enter into the real merits of the question. I desire, merely, he said, to have it clearly understood what is the real significance of the two propositions of the United States, which aim at the re-establishment of the Double Standard and the free Coinage of Silver. The question is whether the entire universe is about to adopt the Double Standard, and admit not only the unlimited Coinage of Siver, but the fixing of an international ratio between the two metals. It is this which makes the novelty of the present discussion. The re-establishment, rehabilitation, of Silver has been mentioned. But in the mind of no one has there ever been any question of excluding Silver from circulation. No one ever had that intention, and it is not this which separates the bi-metallists and the mono-metallists. Silver will always be a monetary metal. The true question laid down is this: Is it desirable to adopt the Double Standard everywhere? Or is it better to maintain the present condition of things? that is to say, to continue to have here states with the Gold Standard, there states with the Silver Standard, and elsewhere states with the Double Standard?

In this matter, and to treat the question from an elevated point of view, Mr. Feer-Herzog congratulates himself at seeing as members of

this Conference the representatives of a state which is at the same time a kingdom of Gold in Europe and a grand empire of Silver in Asia. Their opinions will be received with the profoundest interest. As for himself, on the field of discussion as it had been defined, he found himself in disaccord with the American Delegates. He thought that the states ought to remain, respectively, as compared with each other, what they have been up to the present time, and he declared himself opposed to the establishment of an international relation between the two metals.

COUNT RUSCONI was of opinion that, in consideration of the importance of the questions which were about to be discussed in the Conference, it would be extremely desirable that Germany be represented. He asked, therefore, if it would not be possible that an invitation be addressed in this sense to the German Government.

THE PRESIDENT (Mr. Say) observed that the Government of the United States had, without doubt, invited Germany, and that it was much to be regretted that the Conference should be deprived of the light which Delegates of that power might have contributed to the discussion.

MR. JAGERSCHMIDT remarked that if the Conference were apprised of the terms of the answer made by Germany to the invitation of the United States, it would be in condition to appreciate whether it could profitably give effect to the suggestion of Count Rusconi.

MR. FENTON had not in his possession the correspondence exchanged on this subject between the Government of the United States and that of Germany. He did not recall with precision the terms of the response made by Germany; but he thought he could safely say that there was nothing in that response which need preclude the Conference from realizing the desire expressed by the chief Delegate of Italy.

MR. GOSCHEN observed that the German Government might, perhaps, cause itself to be represented at the Conference under the same conditions and reservations as the English Government; that is to say, in expressing the resolution to remain firmly attached to its system of the Gold Standard, and in giving to its Delegates instructions similar to those which were received by the English Delegates. Such a participation in the Conference, without binding Germany in any way, might be as useful to her as it would be to the English Government, regarded from the point of view of information. It is, added the English Delegate, the prospect of this benefit, but chiefly a consideration for its monetary interests in India, that decided that government to participate in this reunion. Although having nothing to change, and desiring to change nothing in its monetary system in Europe, it considered that on account of its interests in Asia, where the Standard of Silver is

in vigor, it ought not to remain a stranger to debates in which the situation of Silver as Money would be under discussion.

COUNT RUSCONI urged that effect be given to his suggestion, and added that the same interest which had before decided England to accept the invitation of the United States might to-day induce Germany to receive favorably the invitation of the Conference.

MR. JAGERSCHMIDT said that if the Conference should adopt the proposition of Count Rusconi, as it seemed inclined to do, an extract of the Journal might be communicated to the German Government, containing the discussion which had just taken place, and expressing, in the name of all the Delegates, the desire of which Count Rusconi had made himself the interpreter.

The Conference decided that this communication should be made by its President.

The session closed at 4½ p. m.

EXHIBITS OF THE SECOND SESSION.

EXHIBIT A.*

A STATEMENT OF THE CURRENCY SYSTEMS OF THE UNITED KINGDOM, ITS COLONIES AND DEPENDENCIES.

Gold is the only standard metal.

The metal coined is .916 fine, *i. e.* $\frac{11}{12}$ pure Gold and $\frac{1}{12}$ alloy.

The Coins are sovereigns and half-sovereigns. (There is also a 5-sovereign piece, but it is not in circulation.)

The sovereign, representing the pound sterling, contains 113.001 grains (7.3225 grammes) of pure Gold, or 123.27447 grains (7.98805 grammes) of Standard Gold.

The half-sovereign precisely the half of the above.

Sovereigns and half-sovereigns are Legal Tender to any amount, provided that the pieces be not worn below 122.5 grains and 61.125 respectively.

Below these weights they may be refused, and the Bank of England cuts all such light Coins tendered to it, and receives them only as so much Standard Gold.

The loss on light Gold Coin is thus borne by the public.

Every person is entitled to bring Gold to the Mint for Coinage, and to receive it back in his turn, cut into Coins stamped with the proper die as a certificate of due weight and fineness at the rate of £3. 17. 10½ per ounce troy (grammes 31.1035) of Standard Gold, that is to say 1869 sovereigns for 40 pounds troy of Standard Gold.

If the Gold so brought to the Mint is higher or lower than the Standard, the Mint adds alloy or fine Gold, for the account of the owner, as it is needed to bring it down to the Standard or to bring it up.

The Bank of England is by law obliged to receive all Gold brought to it by the public, paying for it immediately at the rate of £3. 17. 9 per ounce Standard.

The difference of three half-pence per ounce compensates the bank for the loss of interest between the date of its bringing the Gold to the Mint and the date of receiving it again in the form of Coin, and gives it also a small profit by way of brokerage for its trouble.

* This document was presented and first printed in English; a French translation was added in the Official Journal.

The public finds that its own loss in interest and expenditure in the operation, were it to take Gold to the Mint, would be more than three half-pence; consequently by far the greatest part of the Gold coined in the United Kingdom is taken to the Mint by the Bank of England.

The Silver and Copper Coinage is only "token" or representative money, metallic *notes*, so to speak, for parts of a sovereign.

Silver	The crown or five shilling piece represents	one quarter of a sovereign.
	Half crown (two shillings and sixpence)	one eighth of a sovereign.
	Florin (two shillings)	one tenth of a sovereign.
	Shilling	one twentieth of a sovereign.
	Six-penny piece	one fortieth of a sovereign.
	Groat, or four-penny piece (no longer coined)	one sixtieth of a sovereign.
	Three-penny piece	one eightieth of a sovereign.
Copper	Penny	one two hundred and fortieth of a sovereign.
	Half-penny	one four hundred and eightieth of a sovereign.
	Farthing	one nine hundred and sixtieth of a sovereign.

(There are also coined Silver pennies and two-penny pieces, but they are not in general circulation.)

The Silver Coinage is a Legal Tender to the amount of forty shillings only.

The copper Coinage is Legal Tender to the amount of one shilling.

The Silver to be coined is of .925 or $\frac{37}{40}$ fine; and one troy pound, costing 52½ shillings at the present market price, is coined into 66 shillings, a sum fixed when the price was normally about 60 shillings.

The material of the copper, or rather bronze, Coinage is the same as that of the French copper Coinage. One pound avoirdupois is coined into 48 pence. The same quantity is coined into 80 half-pence or into 160 farthings.

It will be seen that, beyond the cost of making the subsidiary Coins, a considerable seigniorage is charged on both Silver and copper, which contributes toward the cost of coining the sovereigns, and of replacing the Silver Coinage, which is withdrawn from circulation so soon as any pieces are so worn by use that neither effigy or legend are distinguishable.

BRITISH INDIA.

In British India the Silver rupee is the Standard of value, and its subdivisions are a half rupee, a quarter rupee, and an eighth of a rupee. The weight of the rupee is 180 troy grains, and it is to contain 165 grains of fine Silver and 15 grains of alloy. Its subdivisions are of proportionate weight, and of the same Standard of $\frac{11}{12}$ of fine Silver and 1 of alloy.

The rupee and half rupee are Legal Tender in payment, provided the Coins have not lost more than two per cent. in weight, and have not been clipped, or filed, or debased, or diminished, otherwise than by use.

The quarter rupee and eighth of a rupee are Legal Tender only for fractions of a rupee.

The Gold Coins are a mohur or 15-rupee piece, a 10-rupee piece equal to two-thirds of a mohur, a 5-rupee piece equal to one-third of a mohur, and a double mohur or 30-rupee piece.

The weight of the mohur is 180 troy grains, and it is to contain 165 grains of fine Gold and 15 grains of alloy. The other Gold Coins are to be of proportionate weight and of the same fineness.

No Gold Coin is a Legal Tender in payment.

The copper Coins are a double pice or half anna, a pice or quarter anna, a half-pice or one-eighth of an anna, a pie or one-third of a pice, or one-twelfth of an anna. The weight of the double pice is to be 200 troy grains, and the other Coins of proportionate weight.

The copper Coins are Legal Tender only for fractions of a rupee.

The Government Mints of Calcutta and Bombay are open for the receipt of Gold and

Silver bullion and Coin, and the public can have their Gold and Silver, when ascertained to be of standard fineness, coined, subject to a duty of 1 cent on the produce of Gold and 2 cents on the produce of Silver, a melting charge being also made of one-fourth per mille on Gold bullion and Coin, and of one per mille on Silver bullion and Coin.

Up to the time of the discoveries of Gold in California, Gold mohurs were received at the Government treasuries in payment of revenue; and for a short time, after the increased production of Gold, as they were not Legal Tender and were not applied for by the public, they accumulated in the Government treasuries. A notification was accordingly issued by the Government of India that from the 1st January, 1853, no Gold Coins would be received except by the Mints for Coinage.

Subsequently, in 1864, the Government of India was desirous of bringing the sovereign into use as part of the currency of India, and a notification was issued that sovereigns and half-sovereigns would be received as equivalent to 10 and 5 rupees respectively, but higher prices being obtainable in the bazaars, none were tendered at the Government treasuries. In 1868 the government notified that sovereigns and half-sovereigns would be received as equivalent to rupees 10, annas 4 (rupees 10.25) and rupees 5, annas 2 (rupees 5.125) respectively, but that notification was also inoperative, the bazaar prices being higher.

Up to the present date no further steps have been taken by the government for bringing sovereigns into use.

COLONIES.

It is not easy to understand upon what principle the different systems of currency which prevail in the several colonies have arisen, unless it is known that, under the policy formerly pursued, the British Government endeavored to extend the currency law of the United Kingdom to all its colonies and dependencies. But as it was impossible immediately to expel the Coins which were already in use (in most cases the old Spanish Gold doubloons and Silver dollars) it was found necessary to legalize these Coins concurrently with sterling currency, and thus to establish a Double Standard.

Experience, however, proved that, although British currency was well adapted for some colonies, it was impossible to force the currency law of the United Kingdom upon the Silver-using countries of the East, or upon small military settlements in foreign parts, such as Hong-Kong, Gibraltar, or British Honduras. The policy followed in later years has, therefore, been to adopt the Single Silver Standard for the colonies situated in that part of the world in which the use of Silver prevails; and, in military settlements, to accept the currency of the nation by which they are surrounded.

It will be seen from the following details that this policy has not yet been thoroughly carried out in some of the less important colonies.

The currency of the following colonies is based upon a single Gold Standard: MALTA, CAPE OF GOOD HOPE AND NATAL, AUSTRALIAN COLONIES AND NEW ZEALAND, GIBRALTAR, DOMINION OF CANADA, NEWFOUNDLAND.

NEWFOUNDLAND.

The Gold Coins of the United States, as well as the old Spanish doubloons, are rated for circulation, concurrently with British Gold Coins, at their intrinsic value.

Silver dollars containing 373 grains troy of pure silver, and their subdivisions, as well as British Silver Coins, are legal tender up to $10; bronze Coins up to 25 cents.

Accounts are kept in dollars and cents, the unit being an imaginary dollar, of which 985 are equal to 1,000 United States Gold dollars, and 480 to 1,000 sovereigns.

MALTA.

The legal currency of this colony is exclusively sterling; the Coins are supplied from the Royal Mint.

CAPE OF GOOD HOPE, NATAL, AND THE TRANSVAAL.

Here the legal currency is also sterling; Gold being supplied either from England or from Australia, and Silver subsidiary Coins from the Royal Mint. Bronze tokens are rare. British Coins will no doubt soon find their way into the newly annexed district of the Transvaal, where only Paper has hitherto been in circulation.

AUSTRALIAN COLONIES AND NEW ZEALAND.

The legal currency of all these colonies is sterling; there are two Mints, at Melbourne, in Victoria, and Sydney, in New South Wales, which are open for the Coinage of Gold. The Coins struck at these Mints are Legal Tender in Great Britain, and in all colonies where British Gold is legally current.

The subsidiary Coins required in Australia and New Zealand are supplied from the Royal Mint.

GIBRALTAR.

In 1872, Spanish Coins were made the sole legal currency of this colony, but as the British Government was not willing to countenance a Double Standard, the Gold Doblon d'Isabel, of $\frac{9}{10}$ fineness, and of a minimum weight of 128.7 grains (98 of which are intrinsically equal to £100), was taken as the unit, and the dollars and other subsidiary Coins were only made Legal Tender to a limited amount.

As the Spanish Government has now adopted the currency of the Latin Union (although without entering the convention), it will be necessary to alter the law in Gibraltar and to substitute the Gold Alfonso or 25-peseta piece containing 124.446 grains of $\frac{9}{10}$ fineness (the peseta being equal to the franc or lira, and the intrinsic value of the Alfonso being nearly 19.10) for the Doblon d'Isabel, which is now in process of demonetization. The subject is under the consideration of the Treasury.

DOMINION OF CANADA.

The Gold dollar, containing 25.8 grains of $\frac{9}{10}$ fineness, and 23.22 grains of fine Gold, is the unit, accounts being kept in dollars, cents, and mills.

The sovereign is Legal Tender for $4.86\frac{2}{3}$.

The Gold eagle of the United States for $10, and its multiples and subdivisions proportionately.

Any other foreign Gold Coin may be made Legal Tender, at its intrinsic value, by a proclamation issued by the governor-general.

Silver Coins are Legal Tender up to $10.

Copper and bronze up to 25 cents.

The currency of the Dominion consists almost entirely of Paper, with a subsidiary token Coinage, the supplies of Canadian Silver which are sent out from the Royal Mint being sufficient for internal circulation. This subsidiary Coinage is of the same fineness as in the United Kingdom, viz, $\frac{37}{40}$.

Large reserves of British and United States Gold are kept by the banks; but very little American and still less British Gold is in circulation.

The currency of the following colonies is based upon a Single Silver Standard:

HONG-KONG.

STRAITS SETTLEMENTS.

CEYLON.

MAURITIUS.

HONG-KONG.

Since 1862 the Mexican dollar, or other Silver dollar of equivalent value, has been the sole unlimited Legal Tender in Hong-Kong. The colony has a subsidiary Coinage of its own (sent out from the Royal Mint), the Silver tokens being Legal Tender up to $2 and the bronze up to $1.

The Mexican dollar is supposed to contain 416 grains of Silver, of $\frac{9}{10}$ fineness; and

consequently 374.4 grains of fine Silver; but in 1873 a somewhat heavier dollar came into circulation. From assays made at the Royal Mint, it appears that the Coinage weight of the Mexican dollar is now 417.48 grains, containing, therefore, 375.732 grains of fine Silver.

A Mint was established at Hong-Kong in 1862, to coin dollars equivalent in value to Mexican, but was abandoned in 1869, on account of the expense entailed on the colony.

The community having expressed a desire that the United States trade-dollar should be legalized, the treasury have stated that they will offer no objection, but have pointed out that some difficulty may arise from the fact that payments of large sums are in practice made by weight instead of tale, and that the trade-dollar contains 420 grains, and is therefore from 2½ to 3 per cent. heavier than the average Mexican dollar.

Owing, however, to the Mint charge recently imposed by the United States Government, the importation of trade-dollars has greatly decreased.

STRAITS SETTLEMENTS.

Under a proclamation issued in 1875, the United States trade-dollar, and the Japanese yen (now coined of the same weight as the United States trade), were made Legal Tender as well as the Mexican. Otherwise the currency is similar to that of Hong-Kong.

CEYLON.

Since 1869, the East Indies rupee of 180 grains of 11/12 fineness (165 grains of fine Silver), with its Silver subdivisions of one-half, one-quarter, and one-eighth, has been the sole unlimited Legal Tender. The subsidiary bronze Coinage is Legal Tender up to half a rupee.

MAURITIUS.

The disturbed state of the currency in this island, where a Double Standard prevailed, was reformed in 1876, when the rupee was adopted as the unit of value, and the currency was assimilated to that of Ceylon, except that any *new* Silver and bronze subsidiary Coinage, which may be introduced, will be Legal Tender up to five rupees. Such tokens will be struck at the Royal Mint.

WEST INDIAN COLONIES.

The Coins in circulation in the West Indies (excepting in British Honduras and the Bahamas) consist entirely of British token Silver, which may be tendered to an unlimited amount. The history which has brought about this result is somewhat complicated, but briefly it may be stated that in these colonies, up to a recent date, a Double Standard existed, the Gold doubloon at 64*s.*, the Silver dollar at 4*s.* 2*d.*, as well as United States Gold (the eagle at 41*s.*—), being Legal Tender, concurrently with sterling coin. Gold becoming overvalued under this system, dollars entirely disappeared; and no limitation having been placed on the Tender of British Silver Coin, it gradually became the only currency of the colonies. It is obvious that it is to the advantage of the banks to keep up this system, which gives them an entire command over the exchanges; and they have hitherto defeated several attempts on the part of the treasury to induce the colonies to accept the 40*s.* limit which is the law of the United Kingdom.

During the late fall in the value of Silver, dollars (the only intrinsic Silver Coin of the colony) became overvalued as compared with Gold and with British token Silver, which of course possesses the same value as Gold; and importations of dollars (which could be purchased in London at prices considerably under 4*s.*, and issued in the colony at 4*s.* 2*d.*) commenced.

The colonies were alarmed at the introduction of a Coin which had become unknown, and, after application to the Imperial Government, were allowed to demonetize the dollar, and thus a Single Gold Standard was established in the West India

Islands and British Guiana. But there being no limitation on the Tender of British Silver, the currency in fact rests upon a token Coinage instead of on Gold; and a circular has been addressed to the several governors pointing out the evils of the present system, and recommending that the currency law should be assimilated to that of the United Kingdom by the adoption of the 40*s.* limit to the Tender of the token Coinage.

It may be added that Jamaica has a subsidiary nickel Coinage supplied from the Royal Mint; the natives objecting to bronze coins.

BRITISH HONDURAS.

The history of the currency of this colony is very curious; but for the present it will suffice to state that, although the legal currency is the same as that of the West Indies before the dollar was demonetized in 1876, yet as British Honduras is a small settlement, surrounded by Silver-using countries, the circulation consists almost entirely of the dollar of the Central American republics and United States.

This case is also under the consideration of the treasury; and it has been suggested that a Single Silver Standard would be best suited to the requirements of a country in which practically no Gold circulates.

BAHAMAS.

This is another Colony in which the currency law of the West Indies before the demonetization of the dollar nominally exists, but, owing to the proximity of the islands to the United States, the circulation consists almost entirely of the coins of that country.

The same may be said of Turk's and Caicos Islands

WEST AFRICAN SETTLEMENTS AND GOLD COAST.

Sterling coins are Legal Tender on the west coast of Africa, concurrently with Gold doubloons, Silver dollars, French Gold and Silver, United States, Spanish, and Portuguese Gold, &c.

Rock Gold and Gold dust is generally received at £3 17*s.* 2*d.* per ounce.

SAINT HELENA.

The legal currency of this island consists of sterling Coins, with Gold doubloons at 64 and Silver dollars at 4*s.* 2*d.*

NOTE.—It may be added that in those colonies which have a subsidiary Coinage of their own, circulating only within the colony, the Royal Mint charges only the actual expenses of producing the token Coins, and the profit falls to the colonial treasury. But as regards those colonies which have adopted the currency of the United Kingdom in its entirety, the profit on the issue of subsidiary Coins of necessity remains in the imperial exchequer.

G.-J. GOSCHEN.

EXHIBIT B.

NOTE ON THE MONEY SYSTEM OF THE NETHERLANDS AND COLONIES.

The Coins which have an unlimited paying power are the same in the Netherlands and in the colonies. They are of Silver and Gold.

The Silver coins are the pieces of 2 florins 50 cents, of 1 florin, and of 50 cents. They contain $9^{gr}.450$ of fine Silver per florin.

In Gold there is only the piece of 10 florins, containing $0^{gr}.6048$ of fine Gold per florin. The relation of value between the two metals is therefore 1 to 15.625.

The fractional Money, which is different in the Netherlands and in the colonies, consists only of pieces of 25 cents and under.

The Coinage of Silver—formerly free as to pieces of 2 florins 50 cents, of 1 florin, and of 50 cents—has, for some years, been wholly reserved to the government. The Coinage of Gold is free.

There have been coined in Silver, pieces of 2 florins 50 cents, of 1 florin, and of 50 cents, the fabrication of which dates from the Monetary Law of 1839, 461 millions of florins.

A large quantity of this has been melted down in the colonies for the requirements of jewelry.

In Gold pieces of 10 florins, the fabrication of which dates only from the law of the 6th of June, 1875, there have been coined 68 millions of florins.

The metallic stock in the Netherlands, excluding the fractional Money, but including the ingots and foreign Coins in the possession of the Netherlands Bank, may be estimated at 133 millions of florins in Silver and 74 millions of florins in Gold.

In the colonies no estimate of the metallic stock is possible.

The value of Money, as manifested by the price of the metals and the rates of exchange on foreign countries, is regulated, as well in the colonies as in the Netherlands, not upon the basis of the Silver contained in the pieces of 2 florins 50 cents, of 1 florin, and of 50 cents, but upon the Gold contained in the pieces of 10 florins.

W. C. MEES.

AUGUST 16, 1878.

EXHIBIT C.

List of the Documents and Treatises on the Monetary Question, laid upon the table of the Conference by Mr. Fenton.

No. 1. Finance Report, 1877.

No. 2. Money and Legal Tender. Linderman.

No. 3. —

No. 4. Acts of Congress relating to loans and the currency from 1841 to 1872, inclusive.

No. 5 and 11. Instructions and regulations in relation to the transaction of business at the United States Mint and Assay Offices, 1874.

No. 6. Annual Report of the Director of the Mint, for the fiscal year ended June 30, 1876.

No. 7. Annual Report of Director of Mint, for fiscal year ended June 30, 1873.

No. 8. Annual Report of Director of Mint, for fiscal year ended June 30, 1875.

No. 9. Annual Report Secretary of Treasury on the state of the finances for the year 1877.

No. 10. Notes of Conference between the House Committee on Banking and the Currency and Hon. John Sherman, Secretary of Treasury, held April 1st and 4th, 1878.

No. 12. Interview of Senate Committee on Finance with Hon. John Sherman, Secretary of Treasury, in regard to the Resumption Act.

No. 13. Debt statement, United States, June 31, 1878.

No. 14. National Bank Act and amendments, 1875.

No. 15. Report of Silver Commission, United States.

EXHIBIT D.

[Document presented by Mr. Feer-Herzog.]

*Extracts from the Report and Correspondence of John Jay Knox, Deputy Comptroller of the Currency, in relation to a revision of the laws pertaining to the Mint and Coinage of the United States, transmitted to the Senate the 25th April, 1870, by the Secretary of the Treasury.**

[Extracts relative to the question if the exclusive Gold Standard has been really introduced INADVERTENTLY in the law of April 12, 1873.]

I. Mr. Knox, after having made, page 10, the history of the Gold and Silver dollar, says, page 11, under the title—

SILVER DOLLAR: ITS DISCONTINUANCE AS A STANDARD:

"The Coinage of the Silver dollar, the history of which is here given, is discontinued in the present bill.

"The present Gold dollar piece is made the dollar unit in the proposed bill, and the Silver dollar piece is discontinued."

II. Mr. Linderman, in his "Notes on the Mint Bill," appendix to the said report, page 25, states:

"The Silver dollar, half-dime, and three-cent piece, are dispensed with by this amendment. Gold becomes the Standard Money of which the Gold dollar is the unit. Silver is subsidiary, embracing Coins from the dime to the half-dollar."

III. Letter of E. B. Elliott, appendix, page 70, of the said report to the Comptroller of the Currency, under the title—

'THE SILVER DOLLAR, ITS DISCONTINUANCE AS A STANDARD.'

"The bill proposes the discontinuance of the Silver dollar, and the report which accompanies the bill suggests the substitution for the existing Standard Silver dollar of a trade Coin of intrinsic value to the Mexican Silver piaster."

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*This document was presented in English. A French translation was also added in the French Journal.

EXHIBIT E.

NOTE CONCERNING THE CAUSES WHICH LED THE RUSSIAN GOVERNMENT TO SUSPEND THE COINAGE OF SILVER.

It is evident that in a country which has a Silver Standard the fall of Silver below the Paper which serves as a means of lawful payment can only take place under the *régime* of forced currency, that is, when the Paper itself is full Legal Tender, for Paper that is convertible cannot generally be worth either more or less than the metal it represents. If the late fall of Silver had taken place before the suspension of the conversion of Bills of Credit (the Russian Paper Money bears this name), it would have resulted in a depreciation (not nominal but virtual) of the Bills of Credit corresponding to the depreciation of Silver, and also in its turn an increase of premium on the half-imperial.

But under the *régime* of forced currency of inconvertible Bills of Credit, their ability to purchase Gold and their value in general business, whether domestic or international, no longer depend upon the price of the metal Silver. They are determined, first, by the relation between the quantity of Notes issued and the needs of domestic circulation; and, second, by the balance of Russia's international exchanges (whether in merchandise or in funds), and consequently upon the rates of exchange.

The relation of value between the Bill of Credit and the Silver which it represents being thus broken, it might easily happen that their relation to a third object, Gold, might vary; and this in fact occurred.

In July, 1876, Silver being worth at London 3*s.* 11*d.* per ounce Standard (which gives the relation of 1 to 19.67), lost as compared with Gold 27.12 per cent.

The half-imperial being worth at St. Petersburg in Bills of Credit 6 roubles 26 copecks (which, in comparison with the normal value of 5 roubles 15 copecks, gave a difference of 1 rouble 11 copecks), the Bill of Credit lost as compared with Gold 21.74 per cent. There resulted in favor of Paper a difference of 5.38 per cent.

Under these conditions, the introduction of Silver into Russia to be transformed into metallic roubles became evidently a profitable operation, as the following example proves: *

At the rate of exchange at sight at St. Petersburg the 24 June–6 July, 1876, $31\frac{7}{32}$ pence per rouble, one could buy with 1,000 roubles in Bills of Credit a draft on London for the sum of £130 1*s.* 6*d.*

At the price of 3*s.* 11*d.* per ounce Standard Silver at London, at this date one could buy with £130 1*s.* 6*d.*, $664\frac{19}{41}$ ounces, or in Russian weight 46 pounds 64 zolotniks, of fine Silver. This quantity of metal, delivered at the Mint at St. Petersburg, gave the right to receive 1,061 roubles 67 copecks in metallic Silver Money (counting 22 roubles 75 copecks to the pound of Silver). The difference between this sum and the 1,000 roubles employed in the purchase of the draft on London—that is, 61 roubles 67 copecks—offers a net profit of 6.16 per cent.,† inasmuch as in virtue of the law in force the Silver metallic Money must be received at a nominal price, in like manner as the Bill of Credit.

The Delegate of Russia,
THOERNER.

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* We have not taken into consideration the cost of importing the metal; but, deducting this cost from the result obtained, there would still remain a considerable profit.

† The difference between this 6.16 per cent. and the 5.38 per cent. calculated above arises from the fact that the first calculation is based upon the price of Gold at St. Petersburg, and the second on the rate of exchange on London, and that these are not exactly the same.

THIRD SESSION.

THIRD SESSION.

MONDAY, *August* 19, 1878.

There were present,
The Delegates of—
Austria-Hungary,
Belgium,
France,
Great Britain,
Greece,
Italy,
The Netherlands,
Russia,
Sweden and Norway,
Switzerland, and of
The United States of America,
who were present at the last session.

The session was opened at 1½ p. m.

Upon the suggestion of THE PRESIDENT (Mr. Say) it was agreed that the minutes of the second session and those of the subsequent sessions should be submitted to the approval of each of the Delegates individually instead of being read before the Conference.

MR. GOSCHEN, recalling that he had laid upon the table at the last session a memorandum upon the Monetary System of England and of her Colonies, and that Mr. Mees had presented a similar statement concerning the Netherlands, expressed a desire that the Delegates of the other States represented at the Conference should furnish in their turn

a summary statement of the laws which regulate the metallic circulation in their respective countries. He further asked if the Delegates of the United States could not give information as to the amount of their stock of Gold and Silver. By means of this information members would be enabled to appreciate the extent of the resources with which the Government of the United States expected to resume payment in Specie on and after the 1st of January next.

MR. FENTON, in response to the desire expressed by Mr. Goschen, communicated an extract from a letter of the Secretary of the Treasury, from which it appeared:

That there was in the Treasury of the United States on June 30, 1878, of

Gold Coin	$161,343,914
Standard dollars	6,887,948
Gold bullion	6,099,439
Silver bullion	5,891,201
	180,222,502

Of this sum, 56,747,502 dollars are not free, being required, half to pay bonds redeemable in Gold, half to pay Gold certificates of deposit.

123,474,822 dollars were entirely free for the redemption of Legal Tender greenbacks.

The greenbacks in circulation are estimated at $346,618,016.

There was in the Treasury at the time mentioned $7,136,529 in Silver change.

THE PRESIDENT (Mr. Say) asked whether this sum was free, or was appropriated to any other purpose than resumption.

MR. HORTON said that about $120,000,000 were quite free. The additional stock of Gold in the banks and in private hands was not included in these amounts.

MR. GOSCHEN inquired if it was not the intention of the United States government to accumulate a further amount of the precious metals before resumption.

MR. FENTON said the accumulation was constantly going on. They could not fix upon any definite sum for resumption, but felt amply assured that they had present and prospective stock sufficient to carry out and maintain resumption.

MR. GROESBECK added that the balance of trade was largely in favor of the United States in Gold. He had also a letter from the Secretary of the Treasury, stating that the amount of specie set apart for the purposes of resumption was 35 per cent. of the outstanding national currency. The Secretary gave further facts showing that there would be no difficulty in safely resuming specie payment on the 1st of January. Their Government Paper had for some time been at ½ per cent. discount as compared with Gold, and scattered as it was over a country continental in its dimensions, and popular as it was among the people, it was not anticipated that it was necessary to have anything like dollar for

dollar so as to be prepared for resumption. The bankers of New York, whom Mr. GROESBECK had consulted, shared all the confidence of the Secretary of the Treasury, and in their eyes the success of the measure was assured.

MR. FENTON said that the United States were constantly increasing their stock of metal. Between July 1, 1877, and July 1, 1878, the stock of the Treasury increased more than 50 per cent. on the basis of the stock of 1877, and it was believed to be still increasing in the same ratio.

MR. GOSCHEN explained that he had put the question not from the slightest doubt of the ability of the United States to resume specie payment, but in order to form a judgment as to what extent they might become buyers of Silver in the world's markets. If he had rightly understood the figures just given, they appeared to have comparatively little Silver as compared with Gold. They must therefore either accumulate large amounts of Silver or must exchange part of their Gold for Silver. This had an important bearing on the future of Silver, and every State represented here was interested in the question.

MR. GROESBECK had no doubt that if an international agreement could be concluded on the basis of the propositions read at the last session, the United States would absorb for the benefit of Europe not merely the Silver that might be produced in America during the current year or next year, but might even take part of the German Silver.

MR. FENTON wished it to be understood that the rehabilitation of Silver was not essential to the resumption and maintenance of specie payments, though it would facilitate the operation.

MR. BROCH made inquiry concerning the quantity of paper currency for small amounts at present in circulation, including the greenbacks; that is to say, the denominations of one dollar and of two dollars. If the exact amount of these were known, the precise result desired by Mr. Goschen would be attained; members would know the quantity of Silver which must be absorbed by the remonetization of Silver in the United States.

MR. HORTON replied that there was a considerable number of notes of these denominations in circulation. He regretted not having the exact figures at hand at this time, but would procure them, and lay them before the Conference at an early day.

MR. GOSCHEN desired to call the attention of the Conference to one of the declarations made by Mr. Groesbeck at the last session. Mr. Groesbeck had said that if a resolution were formed by the Conference, the American Delegates would only have to report it to their govern-

ment in order to have the conclusions of their report taken into consideration and presented to Congress as a project for a law. Mr. Goschen desired to ask whether the American Delegates had such power that the decisions at which they might arrive in Conference would necessarily be proposed to Congress?

MR. GROESBECK said the United States Delegates had no powers so formal and so broad. But he had no doubt that an agreement arrived at here would be ratified by Congress, if it realized the purpose for which the Conference had met.

MR. GOSCHEN stated that such was not the position of the English Delegates, and that he did not understand that the Delegates of the majority of other Governments occupied a position similar to that of the Delegates of the United States. They were bound, as he was, by instructions which did not leave them freedom of action; and this remark acquired importance when it was considered that the propositions of the United States implied, as Mr. Pirmez had observed at the last session, a resolution to be taken as to the establishment of the Double Standard in all countries. Now, many of the Delegates could not vote for any proposition compromising the Gold Standard. Norway was not free to do so; England was not so either, and the members of the Latin Union, it appeared, were not free to vote at present for a change in the fixed ratio between the two metals, or for the free mintage of Silver, as they were bound by contract one with another. The position was therefore this: The United States invited the Delegates to adopt a proposition which some of them were precluded by their instructions from entertaining.

But, added the English Delegate, if this proposition were rejected entirely, the rejection might be misinterpreted by the public. It would, perhaps, be regarded as a verdict against Silver Money. The future position of Silver would be affected, and the impression which would be produced would not correspond with the opinions of the great majority of the Conference. On the contrary, there is in the text of the American propositions a declaration for which almost all the Delegates could vote, and to which as a principle, personally, for his own part, Mr. Goschen would willingly subscribe: it is this, that it is not desirable that Silver cease to be one of the Money metals.

In any case, said Mr. Goschen, the language lacks clearness. One may desire that some portions of Europe maintain Silver Money without wishing to say all countries generally. In this regard the proposition of the American Delegates goes, perhaps, beyond their own intention, and provokes an opposition and criticism which might be avoided. It would be much to be regretted if this exaggeration, or what was, in a certain sense, a lack of precision in the formula presented, should be the cause of a vote which in its turn should make those who put it forth say more than they meant to say, and imply up to a certain point a condemnation of silver which was by no means in their thought.

England had plainly stated her intention of maintaining her Gold Standard; Norway had said so too; Germany was of the same opinion; while the Latin Union was not disposed at present to resume the free coinage of Silver, or depart from the ratio of 1 to 15½, by which they are now bound. Very little, therefore, could result from the Conference, because most of the States had decided beforehand on a particular policy. Austria, Italy, and Russia might vote for the proposition as a theoretical question, but having a forced currency, they could not give practical support. A theoretical discussion of the Double Standard, or of the advantages of the Single Standard, would, accordingly, in his judgment, be a waste of time. Of what avail would it be to discuss theories out of which it was known beforehand no practical result could arise, and thus to lay down principles which one was not about to follow. If the question of the Double Standard, however, were set aside, another question might fairly be put to the Conference, and one of a most practical and useful character. Assuming that the universal Double Standard preferred by the United States be not adopted, what will be the future of Silver? And towards what end ought all States to work, as far as practicable? The aim, he thought, should be to maintain Silver as the ally of Gold in all parts of the world where this could be done. A campaign against Silver would be extremely dangerous, even for countries with a Gold Standard.

Though England had a Gold Standard, she had great interest in the maintenance of Silver as currency. She had, moreover, a more defined and less compromised position for the discussion of this question than other countries, for she had borne the depreciation of Silver in India without trying to shut her doors upon it. She had done more than any other country to maintain Silver. The Latin Union had shut their doors against Silver; Holland had half shut hers; but while others, afraid of a further depreciation, had taken definite and restrictive measures, England had allowed Silver to take its natural course, and for five years had borne all the burdens resulting therefrom.

The Indian Government had suffered a great loss; the merchants had suffered from fluctuations in value, and public functionaries had suffered from the depreciation, but England had given proof of her faith in regard to Silver by waiting to see whether it would not recover its former value. Had the example of other countries been followed in India, and precautions taken by limiting the mintage or introducing Gold, Silver might have fallen an additional ten or fifteen per cent. The *laissez faire* policy in India had done more than anything else to keep up the value of Silver. If, however, other States were to carry on a propaganda in favor of a Gold Standard and of the demonetization of Silver, the Indian Government would be obliged to reconsider its position, and might be forced by events to take measures similar to those taken elsewhere. In that case, the scramble to get rid of Silver might provoke one of the gravest crises ever undergone by commerce. One or two States might demonetize

Silver without serious results, but if all demonetized, there would be no buyers, and Silver would fall in alarming proportions. Thus all or nearly all States were interested in Silver. He would not enter on the situation of France, but take the case of Belgium. Belgium had coined a large quantity of 5-franc pieces, and if the Latin Union came to an end, these Coins would necessarily flow back to Belgium, which country would then not escape the general embarrassment.

If all States should resolve on the adoption of a Gold Standard, the question arose, would there be sufficient Gold for the purpose without a tremendous crisis? There would be a fear, on the one hand, of a depreciation of Silver, and one, on the other, of a rise in the value of Gold, and a corresponding fall in the prices of all commodities. Again, there was a further important question. Italy, Russia, and Austria, whenever they resumed specie payments, would require metal, and if all other States went in the direction of a Gold Standard, these countries, too, would be forced to take Gold. Resumption on their part would be facilitated by the maintenance of Silver as a part of the Legal Tender of the world. The American proposal for a universal Double Standard seemed impossible of realization, a veritable Utopia; but the theory of a universal Gold Standard was equally Utopian, and, indeed, involved a false Utopia. It was better for the world at large that the two metals should continue in circulation than that one should be universally substituted for the other.

The Conference could not adopt the American proposition, but an attempt might be made, perhaps, elsewhere, to overcome the temporary and abnormal difficulties created by the German stock of £15,000,000 of Silver. At present there was a vicious circle; States were afraid of employing Silver on account of the depreciation, and the depreciation continued because States refused to employ it. As long as this sum of £15,000,000 of Silver was in the market, an expectant attitude must be maintained. It was not the fact of this stock of £15,000,000 being in existence which depressed prices so heavily. If this same sum were in the United States Treasury in place of an equal amount of Gold, the aggregate stock of Silver would be unaltered, but this £15,000,000 would no longer weigh on the market, and Silver might be restored to a normal position. It was in this direction, and renouncing theoretical discussion, that the States interested ought rather to direct their efforts.

MR. VON HENGELMÜLLER stated that the Austro-Hungarian Government had not given to its representatives any authority to bind it in the question which was laid before the Conference. In the opinion of that government, the depreciation of Silver was a fact eminently to be regretted—a calamity which it would wish, on its own account, it were possible to remove; because it was attached on principle to the system of the Double Standard, and in theory could but subscribe to the propositions

of the United States. Unfortunately, the advantage of this system depended upon a general adoption of it, which in the present state of affairs was not to be looked for. The Government of Austria-Hungary found itself, therefore, necessarily compelled to maintain an attitude of expectancy.

On the other hand, it seemed to Mr. von Hengelmüller that the rejection, pure and simple, of the American propositions would be liable to an interpretation which would be unfortunate; people would perhaps infer from it that there was actually nothing to be done to arrest the fall of Silver. If, in order to avoid this difficulty, the Conference desired to formulate its opinions in a response to the questions proposed, Mr. von Hengelmüller would act in conformity with the views of his government, in taking his stand by the side of those who should pronounce in favor of the Double Standard.

MR. MEES stated that he had no instructions which would permit him to vote for the propositions of the United States. It is the opinion, he said, of the Government of the Netherlands, that so long as England and Germany shall retain the system of the Single Gold Standard, it will remain impossible for Holland to adopt another system. Not only she cannot bind herself internationally in this matter, but she could not even adopt separately any other than her present system. Such was the sole declaration which the Delegate of the Netherlands was authorized to make in the name of his government.

But, notwithstanding this, it was not forbidden to him to express his personal opinions upon the question laid before the Conference. It would be, in his view, most beneficial to mankind that many States should adopt the system of the Double Standard, but if the original idea which inspired the propositions of the United States was a good and sound idea, the propositions seemed to him, in the present state of affairs, impracticable in Europe. There is not, he said, at the present time, on the continent, a single State where the Coinage of Silver is free, even outside of the States devoted to the Single Gold Standard. Passing them in review, one after the other, he came to the conclusion that the States which have a circulation of Paper were the only ones which might perhaps accept the propositions of the United States; but, he added, it is the opinion and the co-operation of precisely these States, otherwise so important, which can have no practical utility from a monetary point of view.

Is it then necessary to advise the United States entirely to renounce their idea? Mr. Mees did not think so. If, in his opinion, the United States had no chance of finding allies in Europe, it would be, perhaps, otherwise in Central or South America, and in Asia, in China, in Japan, and even in the English or Dutch Indies. In these regions, the Single Standard of Gold is neither adapted to the needs of commerce nor to the habits of the people. The experiment lately entered upon of employing this system in the Dutch colonies has not shown that it ought to be

permanently maintained there, nor that it may not become proper to establish there another system, which should not be that of the mother-country. Here, according to Mr. Mees, was a part of the world where the United States might seek allies, and if, after having first found them in these regions, they should subsequently succeed in adding to them the countries in Europe now given over to Paper Money, this monetary union would then be sufficiently vast; it would embrace a movement of interests sufficiently extended, that the legal relation of the values of Gold and Silver would become a reality and would dominate over the natural fluctuation of the market of the metals.

Mr. Mees added that if the universal Double Standard was an Utopia, the Single Gold Standard was also an Utopia, and one that would be very dangerous, if by some impossible combination of circumstances it should come to be realized. The general demonetization of Silver undertaken everywhere at once would have the most fatal consequences. It would bring in its train an enormous depreciation in the value of that metal, and would occasion crises alarming in their economic effects. What would be better for everybody would be that the two metals should continue to serve simultaneously, and, as Mr. Goschen had said, lend each other a mutual support.

MR. BARALIS desired to emphasize the extreme importance of the questions laid before the Conference, and asked that they be made the subject of a full and thorough discussion. Such a discussion might lead, so he hoped at least, to an agreement, if not upon precisely the propositions suggested by the United States, at least upon some measure of general utility which should be closely allied to them. For example, the creation of a Coin of universal circulation was a measure demanded by the needs of the race, and the adoption of which would accelerate the progress of civilization.

With reference to the proposition of the United States, the Italian Delegate observed that it did not meet with an unfavorable reception. The greater part, he said, of the Delegates of the various States, and even those of countries which have the Gold Standard, recognize the importance of the part which Silver plays in the exchanges. It seemed to him, therefore, that upon the basis of this idea, which all admit, it would, perhaps, not be impossible to arrive at an understanding. It was in vain, added Mr. Baralis, that people proposed to proscribe Silver under the pretext that it was heavier than Gold. On that ground it would also become necessary to proscribe Gold, because it was heavier than paper. Silver is heavier than Gold, and, as the learned Delegate of Norway has observed, it is thirty times more bulky than Gold, a fact which renders it less convenient and less portable than Gold. But if this be true for a certain portion of the public and for foreign commerce, it is not the less true that Silver is better adapted to the habits of certain classes than Gold. It is peculiarly fitted for the population of the

country districts, among which it circulates or remains quiet, while Gold readily disappears in time of crisis. To demonetize Silver would be, in his view, an extremely injurious measure, and rather than seem to condemn Silver, by hastily rejecting the American propositions, and giving the Delegates from the United States the advice that they seek allies in South America or China, the Italian Delegate desired that effort should be made to settle upon the basis of an understanding, which, for his part, he did not regard impracticable.

THE PRESIDENT (Mr. Say) felt it his duty, following the example of Mr. Goschen, to give to the Conference some explanation of the monetary policy pursued by France in later years. The honorable Delegate of England has rightly said that if we have in theory the Double Standard, we do not have it in practice, inasmuch as the privilege, formerly enjoyed by private persons, of having Silver coined at the mint has been withdrawn. The same remark is equally true of the other States of the Latin Monetary Union.

In the French Chambers, when the question of suspending the Coinage of Silver arose there were long and earnest discussions as to the meaning and effect of that measure. Was it a step toward the Gold Standard, or a provisional condition, which would permit us to avail ourselves of the favorable moment for returning to the system of the Double Standard? The government clearly explained its position on this point. It declared very categorically that we were not moving toward the Single Gold Standard; we are, in its view, in a condition of expectancy, from which we shall not move, except for good reasons when they shall show themselves, and then probably to re-enter into the system of the Double Standard. There are, therefore, various ways of interpreting the Treaty of 1865, and it is hardly possible to see in the Latin Union a body entirely at unison. There are in it various tendencies. Its members are all in accord on certain points; on others they are not.

France, placed in the center of this Union, finds that she has collected in her hands a great quantity of Silver. There are, at present, about 900 millions (francs) in the vaults of the bank, and about 1,500 millions outside of the bank; which gives a sum total of 2,500 millions by means of which the circulation of Silver may be effected in this country. It certainly would not serve our purposes to withdraw Legal-Tender power from such a mass of Silver, which circulates in France as current Money, and to throw it out upon the metal market as mere merchandise. Such an idea is inadmissible.

As for the question of knowing whether it is proper to restore to Silver the Legal-Tender power in countries where this power has been withdrawn from it, we do not believe, said Mr. Say, that it would be allowable for us to give advice to any one on this subject, seeing that we have nothing to offer on our side as a valuable consideration in return,

and hence our advice would lack authority. As he had said at the first session, added Mr. Say, the attitude of the French Government was an expectant one, and it must remain so, so long as the cause of the fall of Silver should not have been accurately recognized and measured, and, notably, until Germany should have completed the sale of its stock of that metal.

Mr. Goschen estimates this stock at 15 millions of pounds sterling; others at 17 millions of pounds.* Whatever it may be, so long as there remains in Germany a mass of Silver which can be estimated at such figures, the market will be in a troubled and uncertain state. The instantaneous, unexpected influence which a mass of metal like this can exert is plainly a very different thing from the influence which could be exercised by a similar mass of the same metal still buried in the bowels of the earth, and which could only be withdrawn from the earth by the prolonged efforts of regular mining, and then in company with a certain amount of Gold. From a commercial point of view, the existence of this mass of coined Silver, which is there in readiness, of which man is already master, which he has under his hand, and which, according to the course of events, he can let go or hold back, as he wishes, exercises an influence far more decisive than that of a mass of Silver which is not produced, and which does not arrive in the Money-market, except gradually—a little at a time. Hence arises an uncertainty, which will not disappear until the day when Germany shall have finally disposed of her stock of Silver. Perhaps this will have taken place within two or three years from now; but still it is this dark side of the question which at the present moment deprives France of her freedom of action.

The proposition of the United States, said Mr. Say, has therefore appeared to us premature; we do not perceive what we can do at the present time in the way of an acceptance; but, on the other hand, we should be unwilling to have the lack of assent on our part, or on the part of the Conference, considered as a condemnation of their system, and as there is no appearance of unanimity, nor that even a majority can pronounce in favor of their proposition, it would seem to us preferable that the Conference should abstain from making a formal answer to the questions which have been proposed to it. In the view of Mr. Say, the better result to be obtained from this reunion would be that the various States represented in it should agree upon the expression of a common idea as to the employment of Silver as Money, and should invite each other reciprocally not to take any measures in their domestic legislation which should be of a nature to contribute to the depreciation of Silver. We hope, he said, that it will be fully understood to what end we suggest the idea of this middle course, and in what spirit we propose it. We believe that Silver is a monetary metal which ought to serve concurrently with Gold in the general movement of the exchanges; we see even that it is almost the sole instrument of exchanges in half of

* See page 730.

the globe, and we shall never believe in the suppression of a Money with which a commerce such as that of the Indian Empire and all of the farther East regulates itself. We believe, on the contrary, that by the mere fact of the development of this commerce, the use of Silver as Money will itself go on developing from day to day; and if, on so many points partaking in the opinion of the United States, we cannot in the present condition of affairs accept their proposition by action, we are not willing to omit to say why it is that we reject it.

To the first paragraph of the proposition—

"It is the opinion of this assembly that it is not to be desired that Silver should be excluded from free coinage in Europe and the United States of America"—

we would willingly give our assent, although for the moment we could not return to free Coinage, and although we do not yet discover the reasons which, perhaps, we shall some day have for re-establishing it.

As to the second paragraph—"On the contrary, the assembly believes that it is desirable that the unrestricted Coinage of Silver, and its use as Money of unlimited Legal Tender, should be retained where they exist, and as far as practicable restored where they have ceased to exist"—we think that Silver ought to maintain the character of legal Money where it possesses it, but we cannot assert that it is proper to give it that character everywhere where it does not possess it.

With reference to the second part of the proposition—

"The use of both Gold and Silver as unlimited Legal-Tender Money may be safely adopted:

"First. By equalizing them at a relation to be fixed by international agreement, and

"Secondly. By granting to each metal, at the relation fixed, equal terms of Coinage, making no discrimination between them."

—we cannot say in advance that there will be such a proportion between the future production of Silver in the mines and the regular and constant demand of Asiatic commerce, that the legal relation of the value of the two metals will never come to be altered. It would especially be difficult for us to assert the maintenance of this equilibrium when we know that with one stroke, in a moment, Germany can throw upon the metal market, when she wishes and as she wishes, the enormous mass of Silver which she still has in hand. To-day this much is certain: the circulation of Silver does not proceed regularly; it is unsettled, and, if we may use the expression, is made sickly by the instability of the ratio. How long will this instability continue? This is something which we cannot know; and here is the reason why the government, being in doubt, has believed it to be its duty to adopt, with the sanction of the Chambers, an attitude of wise and prudent expectancy.

To recapitulate: During nearly a century, that is to say since 1786, the legal relation in France of 1 to 15½ has very nearly expressed the

normal price of Silver.* It is not proved that the recent alteration in the relation is due to causes the effect of which is not likely to disappear. It is therefore not a final, absolute refusal which we oppose to the project of the United States, and although we cannot ally ourselves to them now, we do not mean to say that the question which they propose to us may not one day be answered.

MR. DELYANNI declared that in his quality of representative of Greece, a state allied to France by the treaty of 1865, he fully concurred in the ideas which had just been expressed by the President of the Conference. His instructions directed him not to give his adhesion to any resolutions which should be of a nature to create the impression that his government for its part renounced the attitude of expectancy which Mr. Say had just defined, and the motive of which he had so clearly explained.

MR. FEER-HERZOG said that after having listened with keen interest to the explanations given by the representatives of the great States, and having followed with a peculiar satisfaction the exposition made from a cosmopolitan point of view, of ideas so elevated and so broad, by Mr. Goschen and Mr. Mees, he would ask that it might be permitted to him, in his turn, to make the voice of a small country heard in this important debate which interested the entire world.

In his view, it was a mistake to regard the German "monetary reform" as the principal cause of the depreciation of Silver, and of the instability of its relation to Gold. The center of gravity of the commercial movement of Silver, said Mr. Feer-Herzog, is not in Germany; it is not contained in the existence of this stock of Silver ready for the market, of which a bugbear has been made; this center of gravity is in the Indies.

It is upon the trade of the Indies that the variability of the elements of compensation in the metal-market depend. Last year, for example, there was an exportation of 16 to 17 million pounds sterling from Europe to the Indies, via Suez; in 1876 11 millions were sent. During the preceding years, from 1866 to 1875, the exportations had only been a few million pounds sterling, while, on the contrary, from 1860 to 1866 the average export reached 12 millions. Is it not plain, said Mr. Feer-Herzog, that we have here, in this changeableness of the Indian trade, a controlling fact, capable of determining, by itself, year by year, the situation of Silver in the money-market?

There is no doubt that the commerce of India is a factor infinitely more important in that market than the German stock. In Mr. Feer-Herzog's view, the annual yield of the mines, with the possibilities which it brought with it, stood only in the second rank of importance. He estimated the production for 1876 and 1877 at 440 to 450 million francs, and observed, in passing, that these figures were higher than those which had been given by Mr. Hay, and which had been adopted by the Silver Committee of the House of Commons; but this arose from the fact that

* See pages 251 and 306.

Mr. Hay took account only of the exportations without considering the amount of metal which remained in the producing country.

The reform of the monetary system in Germany, said Mr. Feer-Herzog, of which so much has been said as being the principal cause of the fall of Silver, is far from having the importance which has been ascribed to it. On the 31st of December last, the German demonetization had thrown on the market, in a number of years, no more than the sum of 579 millions of francs, and it remains to be seen how much more is to be sent out. Mr. Delbrück in the Reichstag took as a basis of his calculation on this subject the existence of the *reserves* in the public offices, and indicated in 1878 a sum comparatively small. But very competent persons, outside of official spheres, Mr. Soetbeer, Mr. Bamberger, Mr. Michaelis, give a higher estimate for the present stock. It may be put between 325 and 440 million marks. Taking the total amount of German Coins struck and not retired, and deducting a third for loss, recoinage, and exportation, we obtain for the present stock the sum of 325 million marks. If we calculate that only a fourth of the original stock has been melted or lost, we reach the figure of 440 million marks. These are very nearly the figures given by Mr. Michaelis, 424 millions, or in round numbers 400 million marks, or 500 million francs.*

But if we deduct from this stock the amount which it will be necessary to employ for the fabrication of small change, and if we also deduct what is never found again when an operation of this nature is undertaken—perhaps, in all, a third of the sum given out—the estimate of 15 to 16 million pounds sterling given by Mr. Goschen comes out of all these calculations with a sufficient degree of trustworthiness. Now this sum is almost equivalent to that of the annual production of the mines, and no more.

It is said this Silver is more dangerous than that of the mines, and that it weighs more heavily upon the market, because it is there ready to be thrown upon it suddenly. Mr. Feer-Herzog was not of this opinion. It seemed to him manifest that the German Government would not act in this matter except with great prudence and with precaution; that it would not throw this mass of Silver all at one time upon the market in such a way as to lower the price; that its desire was to let Silver flow out in small quantities, little by little, at the right moment, profiting by good opportunities when they should present themselves. It has up to the present time, he said, proceeded slowly with its sales, and there is every reason to believe that it will continue to act in the same manner, for its interest as a seller is to keep up the ratio and to do nothing to cheapen the price of its merchandise.

Such being the interest of the German Government, Mr. Feer-Herzog was, for his part, unable to see in the metallic stock of Germany that phantom, to the appearance of which all the evils of the present situation were attributed, and which had given to the imagination of some gentle-

* See page 730.

men a mistaken alarm. Can the influence exercised upon the market by the gradual disposal of this stock be compared to the colossal effect produced by the demands which arise from time to time in the Indies—demands caused now by a great undertaking in the way of public works, now by a famine, and which call for the export from Europe immediately, in a single year, as in 1877, of an amount of Silver equal to the sum total of the German stock? Evidently it cannot. In the series of causes which may influence the market ratio of Silver, the existence of this stock falls into the third rank after the commerce of India and the production of the mines.

The Swiss Delegate now entered upon another question, and applied himself to putting in its true light the idea of those who, like himself, were partisans of the Single Gold Standard.

Mr. Goschen had said that the universal Double Standard was an Utopia, and he had added with reason that the universal adoption of the Single Gold Standard would be another: nor, said Mr. Feer-Herzog, is that our object. Those who believe that we, who are called monometallists, desire to drive Silver from the money-market and leave nothing but Gold in the circulation, deceive themselves strangely. There has never been any question among us of suppressing Silver Money absolutely, and reducing to nothing the *rôle* of this metal in human transactions. We have no intention of doing without it. We merely wish to give it the proper place which belongs to it, and not to let it longer usurp a place, its occupation of which is an abuse not without its dangers. We all meet each other, therefore, in the idea that Silver ought not to be eliminated from the circulation. But what ought to be its place? This place Mr. Feer-Herzog had indicated at the last session. It is necessary, he said, to divide the world between the two metals—to choose Gold for the advanced nations and leave Silver to countries whose civilization is backward or stationary.

The President of the Conference has said that France awaits the favorable moment to re-enter into the system of the Double Standard. In Switzerland and Belgium it is the Gold Standard which is taken as the objective point. But this theoretical view, which divides us, does not prevent us from coming to an understanding in action upon the basis of the Treaty of 1865.

If he believed in the future of Gold as sole Legal Money of unlimited coinage, and in the future of Silver as mere fractional coin, Mr. Feer-Herzog desired to say why he did so. It was because Silver was a metal of inferior order, ill-adapted to the needs of civilization, inconvenient for private persons, only fit for backward nations; a metal the value of which had been constantly depreciating for four centuries, and which, when it was maintained in the rank of Legal Tender by civilized peoples, caused, in a certain way, the emission of Paper Money. If in certain countries there had not been an improper circulation of Silver, the circulation of paper would not be so great. This is shown by the exam-

ple of Belgium and Switzerland. It is because we wish to assure to the nations the benefits and guarantees of a metallic circulation that we reject the Silver Standard, behind which we detect the grave abuse of paper money.

It is principally this persistent fall of Silver showing itself as a constant fact which has awakened the attention of governments, and even urges them, when they are not already determined on this step, to adopt the Single Standard of Gold. We see in Silver a metal which depreciates day by day; which the productions of the mines and demonetizations tend to depreciate day by day still more, and which the demands of India alone can sustain; and while France foresees her practical return to the Double Standard, in Switzerland and in Belgium it is hoped that Silver, after a period of transition, during which it will only have Legal Tender for a small sum, may be finally reduced to the simple *rôle* of fractional money.

THE PRESIDENT (Mr. Say) being obliged to retire, now invited Mr. Fenton to occupy his place.

MR. FENTON, the Vice-President, took the chair.

MR. FEER-HERZOG, in continuation of his remarks, declared that the Delegates of Switzerland had received from their Government no authority to participate in any agreement on the adoption, in common, of the ratio of 1 to 16, or of any other relation; it was, indeed, expressly forbidden to them to give the United States any advice upon their monetary arrangements. They can only take part in the general discussion and formulate their opinions on the questions which have been made the order of the day.

COUNT RUSCONI observed with pleasure that no one in this Conference demanded the ostracism of Silver. All admit it, and from different points of view recognize its utility as Money. All that there was to be done, according to the Italian Delegate, was fairly to face the fundamental proposition of the United States, namely, the determination of a relation to be established between the value of the two moneys; a measure which, in his view, it was essential to take, and without which the Conference would be without result. But this relation—is it practicable? Will it maintain itself in the midst of the fluctuations of the market?

To these different questions the Italian Delegate did not hesitate to reply in the affirmative. He did not believe, for his part, that the establishment of this ratio was like the squaring of the circle, a problem impossible of solution. A metal is one thing, he said, but Money is another. Nature makes the metal; law alone makes the Money. If the uncoined metal is subjected as merchandise to all the accidents of supply and demand, all the variations of the market, the coined metal being no longer a merchandise, but having legal Legal-Tender power, has a

price which does not vary. In a piece of metal, coined according to certain rules as to alloy, impression, size, shape, weight, the law becomes in a manner incarnate. It gives it the power of paying obligations, a virtue, a price which the metal-merchandise could not obtain. It is not wrong to say that Silver rises and falls in the market; in the territory of the State, where the law reigns and governs, the value of the Coin does not change. Our countrymen would be greatly astonished if they were to be told that the 5-franc piece which they laid by in 1873, which they put into a savings-bank or kept in their chests, has in the last five years performed all the somersaults outlined in the very instructive table which the Director of the Administration of Coins and Medals of Paris has kindly communicated to the Conference. The metal changes in value it is true; but as long as the State maintains itself the Coin does not change; it has actually and effectively the value which is indicated by its imprint.

Inasmuch as this conventional relation between the coin metals was practicable, inasmuch as it existed and could endure, Count Rusconi urged that the Conference, in establishing it by mutual agreement, should give, as he said, another guaranty, and perhaps the most stable of all, to the peace of the world.

MR. BROCH could not share the opinions which had been expressed concerning the quantity of Gold which had been regarded as necessary for States now subjected to a Paper-Money *régime* in case they should withdraw the Legal-Tender character from their Paper. Not only did he believe that they would not need to make great additions to the stock of Gold they already held in order to restore payment in Coin and in Paper convertible into Gold, but he believed, further, that in order to effect this operation they would require more Silver than Gold. In fact, if they desired to make their bank-notes, or notes of the State, convertible, they would be necessarily compelled to retire the notes of small denominations and replace them with Silver or with Tokens, for Gold was not adapted for fractional Coin, nor for denominations lower than 10 francs, 5 florins, 2 roubles, or 2 dollars. After having thus retired the small denominations from the circulation, and having put Silver in their place, they would certainly not replace all the notes of larger denominations with Gold.

These States would not cease to make use of the powerful lever of credit currency. They would merely need to make their bank-notes convertible in Gold. There is already in these States, said Mr. Broch, a certain quantity of Gold for the requirements of their foreign commerce, for which they have had to pay a premium; they therefore do possess Gold, and it must be said that what they suffer from is not so much a lack of Gold as a superabundance of Paper. In order to retire the excess of Paper Money from their circulation, an acquisition of Gold enough to correspond with the premium on Gold would suffice. If the premium be 10 per cent. it will be sufficient, if they procure an amount

of Gold equal to 10 per cent. of the bank-notes which will not be replaced by fractional Silver Coins, obtaining in addition to this a certain amount as a reserve.

It will be seen, then, that the resumption of Specie Payments, even if it should be accomplished at the same time in all States which are now subjected to the *régime* of inconvertible paper, would not demand a very large quantity of Gold, and, according to Mr. Broch, it is a great exaggeration to say that the total production of Gold for ten years would not suffice for such resumption. In the Scandinavian States very little Gold circulates because people prefer bank-notes, which are there issued in denominations as small as the Gold Coins; these notes are always redeemable in Gold. The Gold remains in the coffers of the bank and of the bankers; among the people it has only a very limited circulation.

It is not precisely Gold, therefore, which is wanting in States which have a Paper-Money circulation; the trouble lies in this, that the Gold which they have is not always in the place where they need to have it—in the coffers of the State, or of the bank, ready to redeem the notes; but it is held by the bankers who deal in it, and sell it at a premium. There is here, said Mr. Broch, a question of finance and of banking, but not a question of Money.

What is lacking in Europe, and is the true cause of the present crisis of manufactures and trade, is not that the Gold now existing is insufficient; it is not the Money which is wanting; it is confidence.* The old *régime* has been overthrown in Europe, and, in some respects it deserved to be overthrown; but there has not yet been established in its place a new system settled and permanent, which has been able to gain general confidence. Nobody desires to enter upon far-reaching enterprises nor engage in undertakings which a long perspective of peace can alone encourage. Men do not feel confidence either in the stability of institutions or in the permanence of the present boundaries of States.

The two countries of the Scandinavian peninsula, which the speaker and his colleague, Mr. Wœrn, have the honor to represent in the Conference, have been so fortunate as to remain untouched by all these great changes. They glory in being the only nations in the world which for sixty-four years have been able to keep the peace abroad and perfect tranquillity at home. There has been no need to fire a single shot within their borders, either for the defense of the country or for the protection of social order. They have, therefore, in this long period, in proportion to their former condition, made progress in perhaps a more marked degree than any other country. Nevertheless, they feel to-day, in company with the rest of Europe, the general depression which weighs upon commerce and industry. Having escaped all the ills which their own faults might have engendered, they undergo the effects of the law of solidarity, which to-day binds together the interests of all nations; and

* See page 388.

they submit to it; having had the benefit of it in other times, they accept the burden of it now.

The situation of the United States of North America can hardly be compared to that of Europe. There, said Mr. Broch, people have no solicitude about peace, nor about the stability of institutions, nor the immense resources of their country. We have seen the United States come forth intact from the most formidable civil war. Their energy, their greatness of soul, their endurance, have all been admired. In the most trying times of civil strife, the most important and richest families, as well as the most modest and poor, have sent forth their sons to the battle-field. The citizens of the United States did not fear to contract a formidable debt in order to sustain the glorious work of their ancestors and maintain their great Union intact. They have also given the noble example of a nation which not only pays in full, without reduction of any sort, the interest of an enormous debt, but which undertakes further, and without delay, to pay off the capital of it, by imposing upon itself severe taxation. We may differ in opinion with them upon certain questions, but we must admire the extent of their resources, and the use they make of them, through their energy of character.

There is no doubt that, as the honorable Mr. Groesbeck has said, they will resume Specie Payments in the coming year; and in the present state of their monetary legislation, it will necessarily be in Gold that they will pay. As long as they maintain the limit which they have wisely fixed for the Coinage of Silver Money, they will be able still for some time to keep up the value of the new Silver dollars at par with Gold; inasmuch as a large quantity will be demanded for domestic trade.

But later, said Mr. Broch, they will not be able to do this if they should continue to coin Silver, and especially if they should adopt the unlimited Coinage of the two metals at 1 to 16 (or more exactly of 1 to 15.98). For the power of the United States, and even the power of all the States of Europe together, would not suffice for the struggle against the balance of international trade, or to change the terms of its balance. The reason is, as the honorable Delegate from Switzerland has so well explained, that the fluctuations of the balance of trade between Europe and the East far surpass in importance the variations in the annual yield of Silver. It is the balance of this constantly increasing trade with people who accept nothing but Silver which, far more than the production of the mines, is the great determining factor in the relative values of Gold and Silver; and in the long run it must be clearly recognized, said Mr. Broch, that the practical influence of trade upon the economic condition of peoples far surpasses that of legislation and of governments.

Mr. Broch was not of opinion that the means proposed by the United States could have the results which they expect from it, even if it should be accepted by all Europe; he did not believe that the free and simultaneous Coinage of the two metals could assure a good circulation. In

his view it would be better to come to an agreement upon a Gold Coin which should have Legal Tender at par in all States which have the single Gold Standard or the Double Standard, with free Coinage of Gold, and likewise upon a Silver Coin which should have Legal Tender at par in all States which have the single Silver Standard, or the Double Standard with free Coinage of Silver.

Each of these pieces of money would have a vast field of circulation before it; each one would be Legal Tender in half of the world. It would then be for commerce to regulate the relative value of Gold and Silver.

But if Mr. Broch differed from the United States on the question of the means, he was also desirous of saying in conclusion that he felt the most profound respect for the sentiment which led them to take the initiative of calling this Conference. By merely doing this, he said, they have brought into clear light that community of interest which unites all portions of the civilized world, and he was convinced that if no resolution come forth from these discussions, they would at least have served to dispel prejudices on one side, and illusions on the other.

The session closed at 4.45 p. m.

FOURTH SESSION.

FOURTH SESSION.

THURSDAY, *August* 22, 1878.

There were present
The Delegates of
Austria-Hungary,
Belgium,
France,
Great Britain,
Greece,
Italy,
The Netherlands,
Russia,
Sweden and Norway,
Switzerland, and of
The United States of America,
who were present at the previous session, and
For Austria-Hungary, COUNT VON KUEFSTEIN.

THE PRESIDENT (Mr. Say) expressed satisfaction at the presence of Count von Kuefstein, and at the part he was about to take in the labors of the Conference.

COUNT VON KUEFSTEIN expressed his recognition of the reception accorded him, and his regret not to have been able to attend from the outset the learned discussions of men whose researches and profound acquaintance with financial and economic questions had made them justly distinguished. He was warmly sensible, he said, of the honor his government had done him in confiding to him the duty of hearing them

and of thus gathering useful lessons and valuable information. The standpoint upon which the Austro-Hungarian Government had placed itself in sending its representatives to the Conference was already understood. It had been explained by his colleague, Mr. von Hengelmüller, at the last session so clearly that he himself had nothing to add. He would confine himself to the expression of a hope that the Conference would result in setting measures on foot which would be calculated to arrest the fall of Silver, and in effecting or at least paving the way for an international agreement in a future more or less near.

The Conference received communication of:

1. A note on the monetary system of Austria-Hungary, presented by Mr. von Hengelmüller. (Exhibit A, Fourth Session.)
2. A Note on the monetary legislation of Russia, presented by Mr. de Thœrner. (Exhibit B, Fourth Session.)
3. A note on the Coins of the Scandinavian States, presented by Mr. Broch. (Exhibit C, Fourth Session.)
4. A note on the monetary legislation of the United States of America, presented by Mr. Horton. (Exhibit D, Fourth Session.)

THE PRESIDENT (Mr. Say) stated that, having transmitted to the German Government the extract from the minutes of the Second Session, containing the expression of the desire of the Conference as to the sending of German Delegates to take part in its labors, he had just received from Prince Hohenlohe, the German Ambassador at Paris, a letter, which he read, and from which it appeared that the German Government, expressing its thanks for this invitation, regretted its inability to accede to the wish of the Conference.

MR. GOSCHEN wished, in order to prevent any misconception, to revert to two observations he had made at the last session. If he had spoken of the quantity of Silver which Germany still had to sell as reaching the amount of 15,000,000 pounds sterling, it was because in discussions of this kind some basis, even though an assumed one, was necessary for the argument, rather than because he was personally convinced of the existence of so considerable a stock. He did not wish it to be supposed, from his use of that figure in the discussions, that he regarded it as the result of a thorough examination. This question of the stock of Silver in Germany seemed to him, indeed, still very obscure. He was anxious, in the second place, to prevent any misunderstanding as to an expression he had employed. When speaking of the advantages of an expectant attitude, he had drawn no distinction in his own mind between the countries which had prevented the influx of Silver by temporary measures, and those which, having hitherto left the mintage of Silver entirely free, were still patiently undergoing all the inconveniences of the depreciation. As to those latter countries, it was impossible for them to enter into engagements of any kind. Their position was very differ-

ent, and the plan of waiting, which might suit those who had already taken defensive measures, might have quite a different effect for those still exposed to all the dangers of the situation.

MR. GIBBS desired to offer some observations on the remarks of Mr. Feer-Herzog at the previous session. I agree with him, he said, on all essential points. Mr. Feer-Herzog is a partisan of the Single Gold Standard; so am I. He would not, however, proclaim war against Silver, and drive it entirely out of circulation; neither would I. But there is one point on which we are not agreed, viz, the influence which the German stock can exert on the monetary market. Mr. Feer-Herzog questions that influence. He attributes the fall of Silver to the progress of civilization—a progress by virtue of which, in his view, every progressive nation must give the preference to the most precious and most convenient metal; whereas, in my judgment, the fall of Silver is really due to the simultaneous action of several accidental causes, to the excessive yield of Silver mines, to the suspension of mintage in the States of the Latin Union, and chiefly to the demonetization of Silver in Germany, an event which must be considered equivalent to a fresh production of Silver. By its monetary reform, said Mr. Gibbs, Germany has become a producer of Silver. But that production has a character altogether different from the normal production of the years as they follow each other. This mass of Silver which exists in Germany has not, like that buried in the bowels of the earth, to be extracted by dint of labor and expense; it is a definite mass, already in the hands of a vendor, who at any moment, and whenever it suits him, can flood the markets of the world with it. The Silver Coin, withdrawn from circulation by Germany, has become merchandise, and as, by virtue of an economic law which nobody contests, the price of any product, of any merchandise, of whatever kind it may be, is governed by the abundance of that merchandise, rising or falling according as the commodity exists in smaller or larger quantity, the price of Silver must have fallen by the mere fact of German Silver being suddenly transferred from current Coin into merchandise in the warehouse. It is, in fact, a quantity produced over and above the normal production of mines. This surplus, weighing on the market, has disturbed the equilibrium between production and consumption, and in order that this result should take place, said Mr. Gibbs, it is not necessary that the merchandise thus produced by Germany should be immediately brought into the market; enough that it exists and is known to exist.

It will be remembered that the existence at one time of a large stock of copper in Chili, in addition to the ordinary production, immediately led to a heavy fall in the value of that metal. Now there is no difference in this respect between copper and Silver. The one like the other is merchandise, and before this economic law, which governs the value of things, all commodities are on an equal footing. If by any

accident the average annual production of any commodity, raw material or manufactured article, were instantaneously doubled, the price of that commodity must inevitably fall. Now, how can it be supposed that the enormous increase of the merchandise Silver resulting from the monetary reform in Germany has not exerted an equally great influence upon the price of that metal? Mr. Feer-Herzog makes little account of it, arguing, that inasmuch as the stock of Silver in Germany is estimated at 15,000,000 or 16,000,000 pounds sterling, this quantity is inferior to the annual production of mines, which he estimates at 18,000,000. But we must not consider the total production of the whole world; we must consider only the surplus which every producing country may export after satisfying its own wants; for it is that residue alone which influences the metal market. Now, if the German stock be compared with this proportion of the annual production of the mines which is available for sale, it will be found that that stock is by far the greater.

Moreover, to appreciate adequately the influence of the demonetization in Germany on the metal market, we must not only consider the effect of the stock still for sale, but must take into account the stock already disposed of, the depressing effect of which continues to be felt. The calculation of the extent to which Silver has been depreciated in consequence of the German reform must be based, therefore, on this total stock of Silver, not merely upon the 15 or 16 millions, but upon the 40 millions sterling sold and unsold. That portion of this stock which, leaving Germany, has entered into circulation, is a latent, determinate, but still operating cause of fall, for it has always tended to diminish by so much the demand for the merchandise. The other part, still to be sold, is an active and additional cause of fall. But these two causes cooperate to the same result; the one by an increased supply, the other by diminished demand. Mr. Feer-Herzog has compared the amount of Silver still existing in Germany with the amount yearly drawn by India from Europe, and he draws the conclusion that India annually consumes as much Silver as Germany could sell in several years. He based his comparison, however, on a single year—1877. Now, if it be true that that year the consignments of Europe to India reached the amount of 16 million pounds sterling, it must not be forgotten, as Mr. Feer-Herzog himself stated, they were much less considerable in previous years. During the financial year 1875–'76 they did not exceed £3,500,000; in 1876–'77 they were only £10,000,000; and from 1865–'66 to 1875–'76 they amounted to only £6,000,000 per annum. It must, therefore, be reckoned, taking this average sum as representing the annual normal consumption of India, that the German stock is equal not merely to one year's consumption, but to two years'.

Adopting the standpoint which the President had occupied on this subject, Mr. Gibbs proceeded to argue that the existence in Germany of a mass of Silver ready to be thrown on the market, while no one could know beforehand the time or manner of its appearance, must neces-

sarily exert a much greater influence on the price of the merchandise than the successive and gradual influx of the natural yield of regularly worked mines. Mine-owners, it was known, were obliged to offer their merchandise by degrees, as it was produced; the delivery was immediate, and however uncertain the production, one thing at least was certain—the quantity produced was sold at the price of the day. There was here, then, an event foreseen and one that could be calculated upon; on the contrary, the sale of a stock of metal already in existence, effected by virtue of a legislative measure, depended on a free-will which escaped all calculation. The actual yield of mines was subject to the market; the produce of a demonetization overrode the market; there is a great difference. He could not, therefore, share the opinions expressed by Mr. Feer-Herzog on this subject, but was strongly inclined to the view that the German stock was the principal cause of the derangement of the metal market, and that the market would not recover its normal condition till that stock should be entirely sold. Until this operation had terminated the value of Silver would be uncertain; it would tend to fall, and might undergo great fluctuations. Mr. Gibbs declared, in conclusion, that he had nothing to add to Mr. Goschen's remarks on the main question, being entirely in accord with him on all points.

MR. WALKER then addressed the Conference as follows:*

The distinguished Delegate from Switzerland contends that the two propositions submitted to the consideration of the Conference are, in effect, but one; that the first proposition, upon which the views of the Conference are immediately solicited, does, in fact, raise the question of the "Single or Double Standard," so called; that is, of mono-metallism or bi-metallism.

To this it would appear a sufficient answer to say that the most important event in the monetary history of the past ten years, the event which has caused the evils, and which threatens the further evils, the experience of which and the apprehension of which have induced the United States to invite this Conference, was the change of Germany, not from the Single to the Double Standard, or *vice versa*, but from Silver mono-metallism to Gold mono-metallism; and that, consequently, when the members of this assembly are asked to express an opinion whether it is desirable that the demonetization of Silver should proceed to the complete reduction of that metal throughout Europe and America, to the rank of token-Money, and to the banishment of the residue to the East to serve the purposes of barbarous ornament, they are not asked to consider a proposition which necessarily raises the question of bi-metallism or mono-metallism.

But I am not content with this short answer to the objection of M. Feer-Herzog.

The proposition to which the attention of the Conference is imme-

* See page X

diately solicited raises in distinct form, and free from the embarrassments of economical theory, a practical question of vast importance to Europe, to America, and to mankind. Bringing up to view certain accomplished facts, and a movement of forces still in progress in the same direction, it asks whether it is desirable that this movement should continue to its full completion or should be arrested, and, if practicable, and so far as practicable, be reversed.

What is it which is thus in contemplation as accomplished or as imminent?

During the past five or six years Silver, which, having been Money from the earliest recorded period, had remained the sole or principal Money of nearly every important State until and even after the discovery of the Gold mines of California and Australia, and which, down to 1873, was still the sole Money of many prosperous and progressive nations, has been suddenly and violently thrown out of its use as Money.

Silver has not ceased to be Money as the result of natural causes, that is, of economical forces operating upon the choices of individual producers or exchangers. The very suddenness of the change, and the violence by which it has been accomplished, would suffice to show this, did we not know that the rejection of Silver has been effected by action distinctly political, the laws or decrees of Government, those laws and decrees having, it is notorious, been suggested and urged by the political economists of a certain school, incited thereto, in no small measure, by the recommendations of a Conference not wholly unlike the present. I refer to the Conference of 1867.

We are not, therefore, asking this body to decree the reversal of a law of nature in asking the consideration of the expediency of arresting and, so far as practicable, reversing the movement for the demonetization of Silver. So far as that movement has proceeded, it has been wholly a work of man's accomplishing as it was of man's devising. The action of Germany in 1871 was wholly gratuitous and of choice, not compelled or even suggested by any commercial, industrial, financial, or fiscal stress or exigency.

That action, involving important changes in the monetary policy of the Scandinavian kingdoms and of the Latin Union, was, as we conceive, taken under bad advice, with partial or mistaken views of the proper relations of Silver to the trade of the civilized nations, in their present state of development, and with little or no consideration of the broader question, as to the effects upon the production of wealth which would be wrought by so great a diminution of the Money supply of the world.

As the Conference of 1867, wholly absorbed in the consideration of the means of securing International Coinage, did incontestably exert a powerful influence in initiating the movement for demonetizing Silver, it remains for the Conference of 1878, with a more sober judgment and a larger view of human interests, instructed as the nations have been by the bitter experience of the past few years, to put forth its hand to

stay the progress of that demonetization which has already brought such mischiefs upon trade and the production of wealth.

In referring thus to the Conference of 1867, I have no wish to disparage the object of International Coinage.

A uniform Coinage of Money by all civilized nations would offer certain, definite, appreciable, but not momentous, practical advantages, and would be, moreover, of considerable sentimental importance. It is worth the making a certain sacrifice of national prejudices; it is worth the incurring a certain, definite expense, in recoinage, and a certain temporary embarrassment of trade, pending the readjustment of monetary systems consequent thereon. It is not worth the sacrifice of a single vital interest of mankind; and the Conference of 1867, in proclaiming a crusade against Silver, for the sake of forwarding the cause of International Money, did a mischief whose consequences are even yet only half unfolded.

I have said that the action of Germany was taken, under advice of professional economists, with partial or mistaken views of the proper relations of Silver to the trade of the civilized nations, in their present state of development. On this point it is imperative, that, with profound respect for the eminent economist, the Delegate from Switzerland, I antagonize, as fully as I may, the position he has here taken.

M. Feer-Herzog expects and desires to see, in the immediate future, the nations of the world divided into two great groups, in the respect of their monetary circulation, the civilized States using Gold as the Sole Standard of value, and the uncivilized, Silver.

On the contrary, it is here maintained that there are not more than three territorially extensive countries in the world—and the recent experience of Germany shows that she is not one of them—which could possibly maintain a Single Gold Standard, upon true economic principles.

If there is any one thing which political economy declares with an unfaltering voice, it is that the principal Money circulating in the hands of the people of any country should be of full metallic value. The coinage of *Billon*, or Token-Money, is indeed admitted by political economists, but only as applied to what may legitimately and strictly be termed the "small change" of trade. (1) To extend the operation of a heavy seignorage to the main body of the Money of a country, what is it but to corrupt the Coin, and to generate in the public body the *morbus numericus* of which Copernicus wrote that it is more fatal than civil war, pestilence, or famine?

Better far, inconvertible Paper Money than a debased Coinage; for the former, at least, does not deceive the sense of the people. If a

(1) Quand la loi limite rigoureusement le billon aux deux usages indiqués ci-dessus, celui des appoints et celui des menues transactions, comme celles auxquelles donne lieu *l'achat journalier du pain, de la viande et du charbon pour une pauvre famille*, cette sorte de *faiblage* des piéces de cuivre n'a aucun inconvenient.—M. CHEVALIER.

wrong, it is a wrong confessed, and which is always suggestive of its proper remedy.

The universal Gold-mono-metallism of Europe which has been recommended would, in most countries, amount simply to this: a scanty Coinage of Gold, held mainly by the banks for the settlement of international obligations, and a vastly preponderating circulation of debased silver.

England, in exacting a heavy seignorage upon the shilling piece, the florin and the half-crown, carries the principle of *Billon* to the verge of safety, though, with an extensive popular use of sovereigns and half-sovereigns, the greater part of the circulating medium is still of full metallic value; but in how many other countries of Europe is there a sufficiently vast accumulation of wealth, a sufficiently high range of wages and prices, a sufficiently rapid circulation, to attract and retain the amount of Gold (especially under the diminishing productiveness of the mines) which would be necessary to constitute the major part in value of the actual Money of the people?

If Gold-mono-metallism in Europe is to mean, as, in this view of the case, it must mean, a principal circulation of debased Silver, with little or no Gold in the hands of the people, but pretty much the whole Gold Coinage held by the banks, for the purpose of international trade, better inconvertible paper! Why not realize at once the scheme of the British Birmingham school of a generation ago: a "national money" for internal circulation only, of no value whatever (saving, thus, the whole cost of debased Silver Coinage), a purely "non-exportable currency," with a Money of "intrinsic value" only for foreign trade, *i. e.*, for international exchanges?

Indeed, what is Gold-mono-metallism, on such terms, but the full realization of the projects of Matthias Attwood and Jonathan Duncan?

So much, in justification of the remark that the action of Germany in 1871 was taken with partial or mistaken views of the proper relations of Silver to the trade of civilized nations in their present state of development. If those nations only are to be called civilized which are prepared to receive Gold as their principal Money, their sole Money of full value, we must, per force, take a somewhat lower view than we have been wont to do of the progress of mankind.

But what of the assertion hazarded that the crusade against Silver was undertaken with little or no consideration of the effects of demonetization upon—

1st. International Exchanges;

2d. The Production of Wealth.

On the first point, we have heard the remarks of the eminent Chairman of the British Commission. No man, perhaps, knows so well as Mr. Goschen the difficulties, the extreme and painful embarrassments, which have been introduced into international exchanges by the recent political action respecting Silver as a Money Metal—embarrassments

which are certain to be perpetuated in time and to become aggravated in degree, if the movement which we have noted in progress is not to be arrested and reversed.

Mr. Goschen, in his remarks of Monday, made reference to a normal price of Silver. I must understand this to mean 61*d.* or thereabouts, of British Money, per oz., being the price from which Standard Silver never departed widely prior to 1873. From this I infer that Mr. Goschen concedes to the French law of 1803 the virtue which is attributed to it by his distinguished countrymen, the late Professor Cairnes, Mr. Stanley Jevons, and the late Mr. Bagehot, viz, that the French law served as "the connecting-pipe" (to use Mr. Jevons' phrase) between the two reservoirs severally of Gold and Silver, which would otherwise have been subject to independent variations of supply and demand, or as an "equalizing machine" (to use Mr. Bagehot's expression) by which the bi-metallic countries, taking the metal which fell and selling the metal which rose, kept the relative value of the two at its old point.

Thus it was, and thus only it could have been, that Silver came to have a "normal price"; that a par of exchange between Gold countries and Silver countries was established and maintained.

Was this adjustment of exchanges desirable? Who gained by it? Who, if any one, lost?

That England profited greatly by it, from first to last, and in every way, it would be preposterous to deny. That India, China, and the other exclusively Silver countries greatly profited by it, on the whole, no one here probably will question. How with the bi-metallic countries? Did they perform this great service to others at a loss to themselves?

To assert that France and the countries associated with her lost by this arrangement merely because England and India profited by it, would be to proclaim anew the brutal doctrine which we know as the Mercantile Theory, which it was the great work of Adam Smith to expose to the contempt of mankind.

But if we cannot give this reason for believing that this great service to the world was rendered by the bi-metallic States at a cost to themselves, what other reasons can be given? May we not, on this question, trust to the sagacity of French financiers, French statesmen, and of the French people themselves, who maintained the policy of the year XI for seventy years, and, though compelled by the action of Germany to suspend the operation of that law, still, in the language of our President (M. Say), look forward to the resumption of this beneficent function, when the present exigency shall have passed away?

For myself, I cannot but believe that, while France might well have wished that the burden should be shared in a larger degree by others, it was better, even for France, that she should do it alone than that it should not be done by any.

But what, Mr. President, if that function is never to be resumed? What if, as the Delegate from Switzerland urges, the nations are to

make their final choice between Silver and Gold? What must be the effects upon international commerce, when a par of exchange between the two great divisions of the earth no longer exists? Must not the trade between them thereafter be conducted under difficulties the same in kind precisely, if not wholly in degree, as those which beset the intercourse of specie-paying nations with others which labor under an irredeemable Paper Circulation?

Yet even more important, in the view of the Delegates from the United States, is the probable effect upon the production of wealth, resulting from the diminution of the Money-supply of Europe and America, already accomplished or in progress, through the gratuitous demonetization of Silver.

Cutting, as in the first instance it does, to the very quick into the profits of the *entrepreneur*, or man of business, which profits constitute the sole motive to production under the modern organization of industry, and enhancing, as in its ultimate operation it must, the burden of all debts and fixed charges, public, private, or corporate—which debts and charges are, in effect, the mortgage which the representatives of past production hold upon the products of current industry—a diminution of the Money-supply is one of the gravest evils which can menance mankind.

The mischiefs of a contracting circulation have twice, at least, in the course of events befallen Europe as the result of the exhaustion of the mines of the precious metals, or the interruption of mining industry by barbarian invasion or civil convulsion. It has remained for this generation and this decade to see these mischiefs brought upon Europe by the deliberate acts of Government under advice of political economists.

Whether the Money-supply of Europe and America would be reduced by the completion of the movement initiated in 1871, to the extent of 40, of 30, or of only 20 per cent., the consequences could not but be most disastrous.

Suffocation, strangulation, are words hardly too strong to express the agony of the industrial body when embraced in the fatal coils of a contracting Money-supply!

At a time when the production of the two historical Money-metals, jointly, is diminishing, this most unfortunate occasion is taken to throw one of them out of use as Money of full value; to remit it to the uses of Token-Money, and to banish what of the accumulated stock of three thousand years' production cannot thus be employed, to be hoarded in the East as treasure, or devoted to personal ornament.

Against so great a wrong to civilization and to the hopes of mankind the representatives of the United States here present raise their earnest protest and warning.

This is our real interest in the Silver question. This it is which brings us here.

That the United States are at present producers of Silver is a consider-

ation so slight, in the presence of far-reaching and enduring interests like these, that it sinks utterly out of our view. Silver mining is but one, and it is one of the least, of scores of industries for which the available labor and the available capital of the United States are far too scanty. With boundless natural wealth lying all around us, unworked for want of men and means, it is a matter of the smallest consequence to us whether we employ a few thousand laborers more or less, in working the Silver mines of Nevada.

Nor does our interest in the subject arise out of the possession of a stock of Silver of which we fear the depreciation. Just emerging, as we are, from the state of suspension into which we were plunged by civil war, we have as yet only a moderate supply of the precious metals, and of that by far the greater part of it is in Gold; Silver having been restored to its rank as Money of full value only a few months since.

But if we held as large a stock as France or India, we should, in our view of the relations of the Money-supply to the interests of trade and the production of wealth, look upon the fall of that Silver to 45, to 40, or to 30*d.* an oz. simply as a net, definite loss, once for all, of so much of our accumulated wealth—a loss to be made good by increased frugality and industry—while we should look upon the reduction of the stock of Money by such a cause as an event of vastly greater magnitude, bringing in its train indefinite possibilities of evil, not to us alone, but to the whole world; not in our time only, but through generations to come.

MR. FEER-HERZOG wished, first of all, to reply to Mr. Gibbs's observations on the influence exerted on the metal-market by the German stock. The difference of opinion between them on this point arose from Mr. Gibbs's adoption of the exclusive standpoint of the London market, and from his attaching importance only to the quantity which arrived at or went forth from that market; which was just as if, with regard to cotton, nothing were taken into account but the actual or probable arrivals and sales in the Liverpool market. From this point of view, the Silver stock of Germany, from its vicinity to London, acquired a much greater significance. His own standpoint, however, embraced the entire globe, the total production and total consumption of Silver. Taking this general view, the annual production was 440 million francs, of which the United States furnished 200 millions. From Mr. Gibbs's standpoint, this latter figure was reduced to 50 millions, viz, the quantity which arrived at London. The German stock, which was naturally formidable in Mr. Gibbs's eyes, was in his own view equivalent only to the annual yield of the mines, or to the possible demand of India for a single year. Their difference of opinion, therefore, arose solely from a difference of standpoint; at bottom they were agreed.

There is another question, added Mr. Feer-Herzog, to which I must revert. It has been said that the limitation of the mintage of Silver in the States of the Latin Union has contributed to the fall of Silver. This is, in my view, a mistake. In consulting the statements of the working

of the Paris mint, the most important mint in the Latin Union, I find that from 1857 to 1865, no 5-franc pieces were coined, although no legislative act then prohibited or limited the mintage of Silver. Well, this did not at that time prevent the rise of Silver. The experience of that period proved, therefore, that the suspension of the mintage of Silver did not necessarily involve a fall in the value of that metal. The Latin Union did not limit the mintage of 5-franc pieces until, in 1873, the commercial relation of the two metals was 1 to 16. Thus the fall of Silver preceded measures of restriction, and it was the fall of Silver which actually instigated those measures when taken.

Such were the minor points on which he did not agree with the English Delegates. For the rest, he concurred in their mode of regarding the main question. He regretted that he could not say as much with reference to the opinions which the learned American economist, General Walker, had developed in his remarkable address. Although unprepared, and although such a statement of views deserved a thorough examination, Mr. Feer-Herzog would endeavor to reply to it, touching only on the most essential points. General Walker had first given a history of the circulation of Gold in late centuries, but this sketch was, in his view, not altogether accurate. In England, especially since the beginning of the eighteenth century, Gold had played a dominant *rôle*. From the date when Sir Isaac Newton rated the guinea at 21 shillings that metal began to be the chief instrument of exchange. If in France, after 1815, the currency was chiefly Silver, after 1850 it became exclusively a Gold currency. It was not admissible, therefore, to consider Europe as devoted during the last two centuries to a Silver currency. The truth was that in Europe, as in the United States, there was a Gold and Silver currency, with a much larger proportion of Gold than of Silver, the Silver currency being especially that of the less rich and less industrial nations. In fine, he denied to Silver the position which General Walker attributed to it as a monetary agent in past times, and he also thought that the learned Delegate of the United States was wrong in criticising, as he had done, the tendencies of the Conference of 1867. At that Conference, in which they were represented, the United States showed themselves warm supporters of the Gold Standard. It was they who led the campaign in favor of Gold. To-day the situation was reversed; it was they who take in hand the cause of Silver. But, in Mr. Feer-Herzog's view, it would not be just to-day to make the reproach against that great assembly that it had raised questions which it was not able to solve and indicated remedies which it had no power to apply. It did what it could, and not without contributing much to the clearing up of the questions it had to consider.

The Conference of 1867 desired what he had permitted himself to demand at the last session; it wished to divide the world between Gold and Silver—to reserve Gold for the civilized, rich, active nations, leaving Silver, the inferior metal, to the less advanced peoples, who were

content with it, and even preferred it, provisionally retaining the Double Standard for nations whose present situation debarred them from pronouncing immediately for one metal or the other. This was the tendency of the Conference of 1867. It discussed, morever, the question of a Gold Coinage, the international creation of which had been demanded here; a question more debated in 1867 than in 1878, and which, there was reason to regret, had not been practically solved. The Conference of 1867, in default of a practical result, at least sowed precious seed on the soil of economic science, which the future would cause to germinate, and which would certainly bear fruit at a period less troubled than the present from the monetary and political standpoint.

Mr. Feer-Herzog then proceeded to defend mono-metallism against the attack which General Walker had directed against it, and after giving in outline the monetary history of three great nations of the world, he drew the conclusion that the greater part of the economic perturbations and disasters which had been provoked in them had been caused by the Double Standard. England, he said, had at first the Single Silver Standard. Under James I and Charles II, the Gold Coinage expanded, but whatever measure was taken by the government, whenever it sought to establish a legal ratio between the two kinds of Coin, the currency was imperiled. Now the Gold Coinage and now the Silver Coinage disappeared, and it became necessary to resort to costly recoinage, as was notably the case in the reign of William III. In 1717, when the value of the guinea was fixed at 21 shillings, Gold became, in practice, the sole Standard; and a close study of history would show that from that date alone England enjoyed, from a monetary standpoint, a certain tranquillity, excepting, of course, the crisis occasioned by the wars of the First Empire. This *de facto* equilibrium became in 1816 a legal equilibrium, but the law did no more than merely consecrate, as it were, what the natural course of things had established.*

In 1792 Alexander Hamilton gave to the recently founded American Union a currency law based on the ratio of 1 to 15 between Gold and Silver. Hamilton knew† that Silver was favored by this ratio, but his political scheme involved the establishment of a national bank with a large issue of notes, and he saw that the circulation of the heavier metal would facilitate that issue. Notwithstanding this ratio of 1 to 15, unfavorable to Gold, there was in the United States for 20 years, owing to the commerce, *via* the Mississippi, with the Spanish West Indies, a somewhat large circulation of foreign Gold Coins, and especially of Spanish doubloons. But in 1812 this state of things disappeared. The United States became a Silver country, and so continued until 1834 and 1837, when new laws established the ratio of 1 to 16 between the two metals. This relation being too high, such a drain of Silver occurred that, in 1853 and

* See in this connection pages 345 *et seq.*

† See pages 460 and 484.

1854, it became necessary, as internal trade was in want of small change, to decree the mintage of a Silver Coin of an intrinsic value very nearly that of the Token Coinage in England. From that moment there was in the United States a currency exclusively composed of Gold, although the Double Standard was still in force according to the law of 1837. One can thus see, said Mr. Feer-Herzog, what ordeals the United States has undergone. The Double Standard, inscribed in the law, has never existed in fact. They have, in fact, had only the alternative Standard—the nature of things has never allowed anything else in any country.

As for France, having sanctioned by the law of 1803 the extremely fortunate* ratio she had adopted as early as 1785, that of 15½, she at first saw her circulation of Gold rise to eight hundred millions. But, notwithstanding, Gold gradually disappeared, and from 1820 France became a Silver country. Her legislation had established the Double Standard; the nature of things, stronger than the law, had established, *de facto*, the Silver Standard; but suddenly, in 1850, as if by a change of scene, Gold came to substitute itself for Silver, and took its place in the circulation. The influx of Gold coming from the Californian and Australian mines raised the price of Silver, caused it to disappear, and it was found, not without alarm, that the Gold Standard was sole master of the field.

Of late years a fresh change had occurred, equally rapid and more serious. While the production of the Gold mines was slackening, Silver, yielded in enormous masses by the American mines, invaded France, and inundated it to such an extent that but for the highly necessary measure of the limitation of the mintage of 5-franc pieces, this rich country, whose balance of trade was usually so favorable, being an asylum open to the depreciated Money of the globe, would have become an island of Silver. The limitation of the mintage of Silver, it must be acknowledged, had saved the Latin Union. It was an indispensable measure—a measure of public safety—the only measure which could remedy the danger inevitably menacing every country legally subjected to the *régime* of the Double Standard system. The necessary consequence of that system was, that inasmuch as of two kinds of Money, both having a forced currency, one would always be at a premium, it was always the worse of the two that the country admitting both was forced to receive. The inquiry of the English Silver Committee had shown in the most instructive way that from 1873 to 1876, before the large demands of India arose, all the excess of Silver produced, rendered available, or unemployed, was poured into France.

Such, in fact, said Mr. Feer-Herzog, was the result of the Double Standard. However looked at, that system was a necessary inevitable speculation at the expense of the people who adopted it for the benefit of the people who did not adopt it. He could never, therefore, agree with the distinguished American economist who had been to-day its eloquent apostle. There was yet another point—a vital point—on which

* See pages 251 and 306.

Mr. Feer-Herzog felt himself obliged to combat General Walker's opinion. The latter had said that the Single Gold Standard led to a limited circulation of Gold, supplemented by Silver Tokens and by a considerable quantity of bank-notes. Now, in his own view it was, on the contrary, the Silver Standard which, as he had remarked at the last session, led to the injurious issue of fiduciary Money. Silver was a heavy and inconvenient metal, disagreeable to handle, to the use of which individuals did not readily submit, whereas Gold, having a much greater value with less weight, was easily carried, and rendered the use of paper much less necessary. Gold was therefore, naturally, much better fitted than Silver to serve as the basis of a metallic currency. In Belgium and Switzerland, since Silver had become plentiful, fiduciary Money had increased to a disquieting degree. The currency, therefore, based on Silver was never but a sham metallic currency, soon, through the force of events, superseded by a circulation of fiduciary Money which, while more convenient, presented in its turn dangers which it was not well to ignore. In short, Mr. Feer-Herzog regarded the thesis so brilliantly sustained by General Walker as condemned by the lessons of experience. He did not think that a fixed ratio could be advantageously established between the values of two metals which the chance of production and the accident of international commerce were constantly modifying. There could only exist, in his view, in any country, a single symbol of the value of things, and to pretend to have two was to put one's self into a condition of perpetual instability, the dangers of which were demonstrated by history. He advocated, therefore, for countries of advanced civilization, with the Single Gold standard, a stable and real metallic currency. Under this system Silver, continuing to be the monetary instrument of less advanced peoples, would no longer serve the former except as small change. Confined to the modest *rôle* of Tokens, it would no more, by its successive rises and falls, lead to those painful perturbations at which peoples and governments had so much reason to be alarmed.

Mr. Waern thought it right to reply to the question put by General Walker, viz, how many nations in Europe, if they adopted the Single Gold Standard, would have, like England, a sufficient accumulation of wealth or a sufficiently active monetary circulation to attract and retain in the hands of the whole people the quantity of Gold Coin which they would require? According to General Walker, these nations would be obliged, side by side with Gold, to keep in circulation a large quantity of Silver, without paying-power as to large amounts—Money of nominal value, which in his eyes would be even worse than an inconvertible Paper Currency—and these nations would be exposed, moreover, in certain circumstances, to undergoing the inconveniences and losses occasioned by the insufficiency of their monetary circulation.

Now, as the representative of Sweden, a country very inferior in wealth

to England, he would observe that the question was not one of a conflict necessarily to arise between two or more nations, and in the course of which the richer and stronger nation would gain an advantage over the others. The question to be decided was whether a particular nation, though inferior in wealth, would not, nevertheless, have the requisite strength to retain the quantity of Gold Coin necessary for its needs. Now, to possess this strength, it was not necessary to be rich. With good monetary laws, good institutions of credit, and prudence in its foreign commerce, any nation, although poor, would always be enabled, when it chose, to retain in its hands the amount of specie, whether in Gold or in Silver, which it required for its exchanges. If, on the contrary, the currency laws were bad, the banks mismanaged, and the imports excessive, neither Gold nor Silver could be retained in the richest country. During nearly half a century, Sweden had not had to resort to inconvertible Paper Money, and the adoption in 1873 of the Single Gold Standard, in lieu of the Single Silver Standard, had in no way changed its situation. Under the Swedish currency law of 30th May, 1873, any quantity whatever of fractional Money was a Legal Tender in the public treasuries, and was convertible into Gold Coin at the State Bank and its branches. Fractional Money in Sweden had thus the same value as Gold.

As to an insufficient currency, Mr. Waern desired to state that operations did not depend solely on metallic Money, but on Paper Money, bills of exchange, and running accounts at the banks; all these operations contributed to the circulation. They assumed, indeed, the presence of a certain amount of metallic Money in the country, but the proportion of this element in the entire circulation would always depend on the general confidence and feeling of security in the maintenance of the public peace. There was no doubt that with prudence and moderation in its enterprises a nation could always reserve the proper amount of metallic currency to serve as the basis of the fiduciary circulation. The injurious effects of the adoption of the Single Gold Standard by the less wealthy nations which had been detailed by General Walker were therefore neither certain nor probable, and there were abundant means of avoiding them. Not so with the dangers they incurred and the losses they underwent through the sudden alteration produced in exchanges, by the demonetization of Silver, by the rise or fall of a metal which had become merchandize; and this was why the Scandinavian States, the greater part of whose commerce was with England, had adopted the same currency system—that of the Single Gold Standard.

Mr. Horton, before entering into an examination of the historical facts upon which the eminent Delegate of Switzerland had rested his conclusions in favor of the Single Gold Standard, wished first to offer a simple remark suggested by the controversy which had arisen as to the degree of influence of the stock of German Silver on the present state of the monetary

market. The President of the Conference and the English Delegates attributed to the existence of that stock a considerable influence, and did not hesitate to say that as long as it remained in existence, or until the elements composing it had been thrown back into circulation, the state of the market would remain uncertain and critical. Mr. Feer-Herzog, on the other hand, contested this influence, and, adopting a general point of view, which enabled his calculations to embrace the production and consumption of Silver in the entire world, had come to the conclusion that the serious fluctuations in the value of that metal which had occurred had chiefly been caused by the variations in the production of the mines, and by the variations in the Indian demand. For his own part, adopting the same general and cosmopolitan standpoint, Mr. Horton would like to inquire what would be the influence of that stock of Silver which would be for sale whenever the statesmen of the Latin Union, yielding to the counsels of the mono-metallists, should resolve on acting like Germany, on adopting the Single Gold Standard or demonetizing Silver? This, as Mr. Feer-Herzog had declared, was the goal at which he was aiming.

Now, the demonetization of Silver necessarily involved the sale of the 5-franc pieces. There were many hundred millions of these coins in the territories of the Latin Union, and there were known to be in France 2½ billion francs' worth of them. Whenever this enormous stock of Silver of the Latin Union should be for sale, a stock compared with which that of Germany was trifling, would Mr. Feer-Herzog continue to discover the causes of the monetary derangement in the demand of India rather than in the supply of Europe? Here was a question which arose from the very standpoint assumed by the learned Delegate of Switzerland; and the chance of this catastrophe, which would be imminent were the doctrines of mono-metallism to predominate in the councils of the Latin Union, ought, it seemed to him, to awaken the attention of those who were interested in the future of Silver, and were aware of the necessity of the employment of the two metals as Money.

Passing from this incidental observation, Mr. Horton proceeded to examine the historical facts invoked by Mr. Feer-Herzog, and contested the truth of the conclusions he had drawn from them. According to the learned Delegate of Switzerland, the Double Standard system had always been attended with inconvenience in France, in the United States, in England when in force there, and had even sometimes been the cause of the most serious embarrassments. Moreover, he had contended, the Double Standard never really existed in them, but in reality they had had only the alternative Standard.

Freeing this last proposition from what seemed to him to be too strongly affirmed, Mr. Horton declared himself ready to acknowledge the possibility of this alternating movement in a country which should seek to maintain between the two metals a legal ratio of value, the permanence of which was rendered impossible by the existence of conflicting ratios in other countries; but, admitting this point, it must be observed that the

alternation spoken of by Mr. Feer-Herzog never occurred in a complete and absolute manner; and if it actually happened that in Double Standard countries only one metal at a time appeared to be the Standard, the other never entirely ceased to be a part of the Standard. What really happened was not the suspension or the entire suppression of one of the two metals as a Standard, but only the withdrawal into the background of one and the predominance of the other, a phenomenon which was determined by the variations in the supply and demand arising in countries other than the one under consideration. As for the inconveniences apparently resulting from the Double Standard or the quasi-alternative Standard, and the serious embarrassments attributed to it because appearing at the same time with it, it was necessary to inquire, first, whether they were the direct consequences of it, or whether a relation of cause and effect was not attributed to a simple coincidence. The real question, moreover, was not so much whether these embarrassments, when arising, were the result of the Double Standard system in force at the time, as whether another system than that of the Double Standard could have been adopted; for what was the object of dwelling on the weak points of a system which had been necessary or inevitable? In comparing the Single Gold Standard system with that of the Double Standard, and in representing the latter as the cause at certain times of certain monetary derangements, Mr. Feer-Herzog had put himself under the obligation of proving that at those periods there was freedom of choice,* and that these countries of which he speaks could have done better than to retain the Double Standard. Now this demonstration of his thesis was lacking.

Mr. Feer-Herzog's sketch of the monetary history of the United Kingdom suggested to Mr. Horton another observation. Mr. Feer-Herzog had said that from 1717 Gold had become *de facto* the sole Standard in England, and that in 1816 the law only, as it were, sanctioned what the natural course of things had established a century before. This was, said Mr. Horton, a version of English history which was generally accepted, but the researches which he himself had had occasion to make into the documents relative to the monetary history of that country had enabled him to ascertain that it was not in 1816, as was generally stated, but in 1798, that for the first time, and at a time when the Double Standard with the right of unlimited mintage existed in England at the legal ratio of 1 to 15.21, the Parliament prohibited the Coining of Silver Money—a law at first temporary (38 George III, c. 59) and soon rendered perpetual (39 George III, c. 75).† It was not, therefore, in 1816 but in 1798 that the Single Gold Standard was sought to be and was actually *de facto* established in England. And with what success? It was well known that throughout the whole period which followed, from 1798 to 1821, there was a contraction, almost a stoppage, in the metallic circulation, and that the real Monetary Standard of England was, in fact, the bank-note, inconvertible and generally depreciated. Would the notes

* See pages 346 and 354.

† See page 348.

of the Bank of England have suffered this depreciation if the Double Standard had been retained? This was the question, and it must be capable of solution in favor of the Gold Standard if the example of England was to be cited in favor of the demonetization of Silver. Now, if it was remembered that Silver then everywhere served as Money, that all the countries with which England held commercial relations possessed more Silver Money than Gold Money, and that Gold not only stood higher than the English ratio, but was constantly subject to the peculiar demand created by the state of war on the Continent, there was good ground for believing that the mono-metallist law of 1798 largely contributed to the monetary confusion from which England suffered at that period.

What Mr. Feer-Herzog had said of the original monetary laws adopted by the American Union might serve as the text for a long discussion, into which he would not enter. He would only, inasmuch as the name of Alexander Hamilton had been mentioned, call the attention of the Conference to the doctrines of that financier with reference to the monetary *rôle* of the two metals. Hamilton deemed it eminently dangerous for the mechanism of circulation that one of the two metals should be reduced to the condition of simple merchandize, and comparing the advantages of an abundant circulation with the evils resulting from an insufficient circulation, he expressly pronounced in favor of the simultaneous employment of the two metals. He regretted that he could not at once place before the Conference the very form given by that statesman to his ideas on this subject in his *Report on the Mint*, but he would look for that document and place an extract from it on the table of the Conference. (Exhibit E, Fourth Session.)

At the time Hamilton wrote that report the question of mono-metallism or bi-metallism had not come into being. Nobody had yet expressed the idea of depriving one or the other metal of its character as a means of international payment. The campaign against Silver, that campaign which commenced subsequently in 1798 with a first blow struck by England at the bases of obligations, and which was being completed in our time by the German demonetization, had not yet opened. Hamilton, by fixing the relation, a measure which in his eyes had a purely local character, might not have secured his country a metallic currency always composed equally of Gold and Silver, but his express intention was to preserve for the two metals their *rôle* of good national and international Money; he maintained for both the right of unlimited mintage, and this was in its entirety a work diametrically opposed to the tendencies of the Conference of 1867, whose doctrines had been extolled by the Delegate from Switzerland.

Having made these observations, Mr. Horton would ask whether instead of diverging into discussions rather collateral than touching upon the precise object of the Conference, it would not be better clearly and categorically to discuss the question, the real question, suggested by

the United States Government, a question which he would state thus: Is it in the interest of the States represented at this Conference to continue to wage a monetary war, by seeking to each others prejudice to get rid of the falling metal, or is it their interest to unite together, in order by a common legislation to give to the monetary basis of the business of the world a stability it does not now possess? Such, said Mr. Horton, in conclusion, was the true practical and urgent question which justified the assembling of this Conference, and if the Conference should separate without at least giving its opinion on this question it seemed to him that it would not fully have fulfilled its task. It would have left an interrogation point at the end of its labors, whereas a reply was looked for from its wisdom and enlightenment.

MR. BARALIS deeply regretted to see that the propositions made by the United States Delegates were in danger of not being received by the Conference as they deserved to be. In his opinion it would not be right to reject them so hastily, and time should be given to the authors of them to develop their arguments in full. The facts upon which gentlemen relied as justifying the rejection of them, were they conclusive as had been alleged? He thought not, and would cite on this point the example of Italy. For a long time the country of Dante and Vico had but a single Standard, that of Silver, which formerly enjoyed the preference and the suffrages of economists. Only since the beginning of this century had the Double Standard been introduced, and notwithstanding all the learned works and all the speeches of theorists this system had never ceased to remain in force.

Usage and local tradition had to be considered in monetary matters, but this was not the only thing to be taken into account. Instead of regarding only the interests and particular customs of each State, could not one from a loftier standpoint consider also the general interests of humanity? Was it not possible to effect, by means of mutual concessions, as Mr. Broch had already proposed, the creation of an International Coinage, which should serve as a tie of union between all nations? Considerable progress had been made in our time in the path of civilization; barriers were everywhere being leveled; Europe was now crossed without passports in 48 hours. Was it not really to be regretted that if one broke his journey on the way he met at every stage with different Coinages, the exchange of which required so many calculations, and always involved sensible losses? If the habits of the populations were an obstacle to making the currency of the different States of Europe entirely identical, could there not be at least one Gold and one Silver Coin fitting in with the particular system of each State, and constituting by the side of different national coins, a common, an international, money?

This, in the view of Mr. Baralis, was a question which it behooved the Conference to consider, for it was intimately connected with the proposition of the United States; and as that question demanded preparatory research and information, he would recommend that the Conference,

after introducing the question into the scope of its labors, should at once appoint a subcommittee charged with preparing the matter for consideration. Let gentlemen recall, he added, what had occurred in the Latin Union, and it would be seen what fruit might be expected from a common understanding of states regarding the creation of an International Coinage. What were the grounds of the Treaty of 1865? In the first place, a desire to establish perfect harmony between the monetary laws of the contracting states, and to secure the mutual circulation of their Coins over the whole extent of their respective territories; and, secondly, a desire of preventing the exodus of Silver, which had been at a premium since the discovery of the Gold mines of California and Australia. It was then decided to coin fractional money .835 fine, a reduction of the standard which was regarded as sufficient to prevent the exportation of Silver, and which at the same time would bring a profit to the State of from 6 to 7 per cent., precisely corresponding to the loss which would have been involved in their withdrawal from circulation; still, however, retaining the fineness of .900 for 5-franc pieces; and this, chiefly in order not to deprive that Coin of the already almost acquired character of an International Coin. Thanks to this agreement, the Silver Coinage had continued to fulfill its highly-successful function in the circulation. Could not some analogous measure be now adopted between a certain number of states, which would secure, if not over the whole surface, at least over a good portion of the Globe, the circulation of Silver Money? Was not what had been possible for the Latin Union also possible for a larger group of states? Such was the question which he was anxious to propose, and the solution of which, relying on experience, he thought he might hope for. He desired that, at least, a solution should be attempted.

He hoped, in conclusion, that the United States Delegates, leaving the region of principles and theories in which the Conference, to his great regret, had hitherto been confined, would be willing clearly to formulate their ideas concerning the actual measures to be taken in order to establish a common monetary system between Europe and their own country. The same special committee for the appointment of which he asked, would consider their propositions, and make a report on which the Conference would ultimately decide. Some practical and useful measure might thus result from its discussions.

THE PRESIDENT, Mr. Say, remarked that the idea thrown out by Mr. Baralis was an incidental proposal, the consideration of which would delay the completion of the present discussion. The question at present before the Conference was to reply to the propositions which had been made by the Delegates of the United States, and until that reply had been given, it was perhaps better for the Conference not to permit itself to be diverted from its object.

Upon this observation from the President the Conference decided that the discussion should follow its course until a decision should be reached respecting the American propositions.

MR. FEER-HERZOG demanded the floor in order to reply to Mr. Horton; he had no intention, he said, of prolonging the debate upon the question of history which had been dealt with by the Delegate of the United States, at what date Silver ceased to be the legal Standard in England and the United States, but would reserve that special controversy for a private conversation.* He wished, however, to reply to the reproach which had been made, of having exclusively directed his criticisms at the Double Standard system, as successively practiced in various countries, and of not having discussed the new system proposed by the United States, viz, the International Double Standard system. General Walker having only enlarged upon the inconveniences of the Single Standard system, and having abstained from explaining the advantages of the International or Universal Double Standard, he had not been led to speak of the latter.

As for the possibility of establishing, by international agreement, a fixed relation of value between the metals, an hypothesis on which the whole United States system rested, he denied it entirely. Let the Conference, for instance, urge England to decree a permanent ratio between the Sovereign and the Rupee; England would refuse. Let it invite Holland to establish that ratio between the Gold Florin and the Silver Florin; Holland would not agree to it. Let it address China, and from China it would not even obtain a reply. What conclusion could be drawn from this, except that it was practically and materially impossible anywhere so to establish such a ratio that it would not be constantly disturbed by the varying requirements of commerce with the Asiatic world.

Independently of these impossibilities of a political order, and even assuming the unanimous consent of governments, there were obstacles to the existence of this fixed relation arising from the fact that the precious metals were not solely used for mintage, but were also employed in manufactures, watchmaking, and jewelry. This employment was specially developed in Oriental countries, principally in the Indies, where the women of the country covered themselves with Silver ornaments. How could this industrial or artistic use, varying as it did according to times and circumstances, fail also to produce variations in the price of the merchandise? The value of the coined Silver could not fail to be affected by the price of the merchandize Silver, for by virtue of the unlimited free mintage which was demanded, Silver could always pass instantaneously from the condition of merchandise to the condition of Money. The fixity of value of Silver as Money in relation to Gold was, therefore, absolutely impossible. There was there a difficulty of an economic order which far exceeded the force of laws, and of international treaties. All the governments together, with their united efforts, could not struggle against the force of events.

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* See page 346.

Mr. HORTON could not admit that the learned Delegate from Switzerland had replied to the question by saying that an international agreement was impossible merely because, in his view, this or that nation would not be willing to accede to it. The Conference was engaged in discussing, with a view of solving the question, whether it was or was not in the interest of the Powers to form such an agreement. In order rationally to reject the idea, it was necessary, not merely to say that one rejected it, but why it was rejected; in other words, to prove that if the agreement were concluded it would not produce good effects. As to the difficulties of the economic order put forward by the Delegate from Switzerland, Mr. Horton could not admit them to be as serious as they were represented to be. For his part he was unable to detect, either in the deep-rooted habits or in the changes of fashion of Asiatic peoples, however large consumers of Silver they might be, a force of events which need be an obstacle to the adoption of a sound monetary legislation by the civilized peoples. Until 1873 the variability of the supply and demand had not prevented the price of Silver from remaining comparatively steady for a long period. This was due to the bi-metallic system of France, which exerted a kind of balancing power over the two metals, and thus kept them in equilibrium. By giving a wider basis to this system, namely, the unlimited employment of the two metals, with a ratio fixed in common by several States, a still more complete stability would be attained.

The remarks made in the course of the session by Mr. Wœrn had also seemed to Mr. Horton not directly to answer to the question submitted, any more than the developments, otherwise so interesting, entered into at a former session by the Delegate from Norway. These effects of the maintenance of one Standard or the other in Sweden and Norway in times past, of which Mr. Wœrn and Mr. Broch had made a statement, in no way solved the question, what would be the situation of these two countries if Holland or the Latin Union should seek to draw Gold from neighboring countries in order to replace their Silver Money, or if the crisis resulting from this situation obliged the Bank of England to protect its Gold reserve by an exceptionally high rate of discount.

In conclusion, Mr. Horton desired to draw the attention of the Conference to two points touched upon by Mr. Mees at the last session. He expressed a desire to know what in the view of the Delegate of the Netherlands was really the importance and character of the monetary ties, the existence of which he had indicated as possible, between the United States and other countries. He further observed that the United States Government, in proposing the meeting of this Conference, had not intended to prosecute an enterprise of private interest, for the execution of which allies would be necessary. It had desired to call the attention of all the Powers to an object of common interest, an object which did not touch itself more personally than it affected other States. It was not unknown that the United States were drawing and would

continue to draw to themselves a large quantity from the metallic stock of Europe. Should they take Gold from Europe or should they take Silver? It appeared to be for the interest of Europe that they should draw Silver from Europe rather than Gold, for that would raise the price of Silver and tend to restore the equilibrium of value between the two metals which was broken to-day.* But in default of an international agreement, it appeared that unfortunately the present monetary war must go on.

Mr. MEES, replying to Mr. Horton, repeated his declaration that he had no power to pledge his government. The ideas he had expressed as to the practical future of the American propositions were purely his own. His opinion was that if the Double Standard system, now proposed by the United States for adoption by the whole world, succeeded in making proselytes, and gradually gaining ground until able, notwithstanding the distance, to approach India, the Government of the Netherlands would then no doubt readily agree to its Asiatic colonies being connected with that system. As to the word "allies" used by him, he had simply meant to speak of the alliance resulting from an identical system, not of that resting on the close obligation of a contract.

COUNT RUSCONI questioned the theoretical value of the principles expounded by the Swiss Delegate, and would himself appeal to facts. Mr. Feer-Herzog had denied the possibility of a fixed ratio between the value of the two Moneys, but did not this fixed ratio actually exist? Did it not exist within the borders of States and even by international treaty within the limits of the Latin Union? For his own part Count Rusconi had never maintained that this ratio, in order to be efficient, must be universal. He did not believe in the necessity nor even in the utility, in the present state of the world, of the universality of the Double Standard; but he believed that what now existed between several States might exist in the same way, by virtue of the same principle, between a larger number of States, and he thought that the broader the basis of union became, the greater the stability and fixity which would be given to the system. It did not appear that the United States Government maintained, nor did he himself, that the entire world should universally adopt the same bi-metallic system, and the same ratio of value. It only desired that by an international agreement the means should be sought not of universality but of fixing a ratio which might be adopted by a certain number of States.

This idea seemed very feasible, and he warmly regretted that the majority of the Conference, judging it from another standpoint, seemed inclined to reject it before having sufficiently considered it. The Con-

[* NOTE.—Strong influences in Europe were anxious to get rid of Silver, all Europe was interested in raising the price of Silver, and under present circumstances must suffer by loss of Gold. This condition of monetary warfare implied in the rejection of bi-metallism in Europe was a succession of defeats for Europe.]

ference was disposed to issue a platonic opinion in favor of the use of the two metals, but to what end could such a declaration serve, if it did not fix the ratio between the value of these two metals, which alone could guarantee the safety of their simultaneous employment?

Count Rusconi, in conclusion, urged that the question should be studied in a practical manner. He again dwelt upon the extreme importance of the subject. The question was, he said, whether States would continue to remain isolated, each one acting at home, each one acting for itself, or whether, using the legitimate power which would result from their union, they would all work together, or whether, some at least, and those the most important, would act together for the general good of humanity. Beyond doubt there were, among those represented at this Conference, some States whose voice, as had justly been remarked, had not all the weight desirable, owing to financial difficulties, which various circumstances had caused to weigh upon them; but let only two or three of the greater commercial nations in the world—let France and England, for instance—come to an agreement with the United States, and the imposing group formed by these two or three States would soon draw the rest of the world into its orbit. It would give to the bi-metallic system a basis broad enough to insure the stability of the relation of the two metals, it would stimulate their circulation, and thus facilitate also the return of Paper-Money countries to a metallic circulation, a measure in which those countries were not the only countries interested. This measure, which, for his own part and as an Italian, he ardently desired, he was afraid of seeing compromised by the demonetization of Silver, or by the maintenance of that metal in a depressed and sickly state, for which by mere words no efficacious remedy would be brought.

MR. GOSCHEN remarked that the facts submitted by Mr. Feer-Herzog, as proving that the limitation of the mintage of Silver in the Latin Union had exerted no influence on the fall of Silver, were not conclusive. Silver might not have been minted, as the Swiss Delegate had shown, when the Coinage of it was free and when Silver was above par from other causes. This, however, did not exclude the fact that when the right of Coinage was restricted, that restriction might, and necessarily must, have contributed in its degree to the fall of Silver, seeing that the prohibition or restriction of mintage had deprived the metal of its monetary virtue, that is to say, the privilege it formerly possessed of being converted into Money. When one had in his coffers a Silver ingot, which he knew he could immediately convert into Money, and of which he knew he could always in that way make an immediate use, that metal had more value than if it could only find in manufactures a use, the conditions of which had to be discussed, and the demand for which might have to be long waited for. A metal transformable into Money had virtually in itself the power of motion and exchange, as also that of producing interest; the non-transformable metal no longer having these

qualities, accordingly suffered a loss of value. It followed, therefore, said the English Delegate, that the limiting or restrictive measures taken by the Latin Union as to the mintage of Silver, had assuredly contributed, in a certain degree, to a depreciation which other, anterior, and more active causes had provoked.

As to the possibility of the establishment of a fixed international ratio between the value of the two minted metals, if he had correctly understood Mr. Horton's proposition, it was a question of a discussion of principle and not of an examination of practical difficulties. What Mr. Horton had asked was that the Conference should pronounce on the utility of the relation, irrespective of the present possibilities or impossibilities of establishing it. Now, he did not consider it necessary to give a categorical reply to a question thus hypothetically put; but if the character of the question were changed by the question of principle being no longer separated from the question of execution, he would modify also the character of his answer and would not in that case hesitate to affirm, as Mr. Feer-Herzog had done, the entire and absolute impossibility of the establishment of a fixed ratio, and this for many reasons of a scientific and economic nature which he need not enter into in detail.

THE PRESIDENT, Mr. Say, asked whether, considering the point at which the discussion had arrived, it did not behoove the Conference, if not to fix, at least to forecast, as it were, the conclusion of its labors? All the members of the Conference were present and had had the opportunity of being heard, the discussion seemed exhausted, at least on the main question, and several members had expressed a desire to know at once when they would be able to return to their respective countries. The Conference might perhaps to-day decide the question whether it would finish what it had still to do in one or two sessions.

MR. HORTON was authorized to say that the Delegates of the United States Government did not think the limits of the discussion could be fixed in advance. They were convinced that it was of the greatest utility for Europe and for the United States of America that not only their own propositions, but the incidental propositions which had already arisen in the course of debate, should be thoroughly discussed. He would recall the fact that the Norwegian Delegate, Mr. Broch, the representative of a state bound to the Single Gold Standard system, and himself, an avowed partisan of that system, had expressed a desire that the discussion on all these points should be full and exhaustive. How could it be supposed that all the other Delegates did not also desire it?

MR. GOSCHEN was of opinion that if there were any hope of arriving at a practical agreement by prolonging the discussion, the advantage of that agreement would be well worth some sacrifice of time; but from the moment when no eventuality of this kind could be foreseen, what

purpose would be served by expatiating on the questions and lengthening out the debates? The Conference might last weeks and months if all the questions connected with money were to be academically discussed; a goodly number of long speeches would have to be made on a variety of points; but he did not think this was the object of the Conference. It had been convoked by the United States Government with a view to formal propositions on the relation of the two metals, and on free mintage. If it was already evident that under the instructions received from their respective governments the majority of the Delegates could not acquiesce in those propositions, no utility would be seen in prolonging a discussion which would necessarily lead to nothing. A purely scientific argument might cause much waste of time.

THE PRESIDENT, Mr. Say, thought that each Delegate having expressed his opinion on the root of the matter, and the general discussion having in fact terminated, the time had perhaps come to make a summing up of it, endeavoring to extract from it, as it were, in a clear and concise form, the ideas which all the Delegates, to whatever system they belonged, found themselves in accord. It would then be considered whether the joint expression of those ideas would not furnish the means of making a reply, although without expressing adherence, to the propositions of the United States Delegates. This, in his view, was the only tangible result which could now be drawn from the Conference, and apart from that endeavor he saw nothing to justify the prolongation of the discussion.

MR. FENTON hoped to be allowed to explain himself with entire freedom on the question of the duration of these discussions. It seemed to him that the subject submitted by the United States for the consideration of the Conference was of too great an interest not to be treated with the most serious attention. Much less important questions had often engaged the attention of Congresses, Conferences, or Parliaments during several months, and he could not readily suppose that all the attention its grave importance demanded would not be accorded to this. The United States representatives had come from far to confer upon the matter with the Delegates of Europe, and as not much more had been done than to touch on the preliminaries of the question, they hoped the Conference would not stop midway, but would agree to prosecute to the end with them the inquiry already commenced. He thought that if the propositions offered by himself and his colleagues did not appear acceptable a committee might be directed to formulate others on which it might be easier to obtain an agreement. There were also, he added, several accessory points on which the American Delegates were desirous of learning the opinion of their colleagues, and which they would indicate if permitted. On all these grounds it seemed to him that even if the discussion on the original propositions terminated at the next meeting, there should still be two or three more sessions.

THE PRESIDENT, Mr. Say, observed that there was nothing to prevent the Conference from deferring to the desire just expressed by the Chief Delegate of the United States by virtue of the principle that every assembly had the control of its own proceedings. He asked the Conference to fix the date of its next meeting.

After a conversation in which Mr. Groesbeck and Mr. Baralis took principal parts, the Conference decided to meet on Monday, the 26th instant.

The session terminated at 5.30 p. m.

EXHIBITS TO THE FOURTH SESSION.

EXHIBIT A.

NOTE ON THE MONETARY SYSTEM OF AUSTRIA-HUNGARY.

The monetary system of Austria-Hungary is based upon the *Silver Standard.* The *florin* is the *unit of coinage.* Florins are coined 45 to the pound (500 grammes) of fine silver.

The florin is divided into 100 kreuzers.

Current coins.

Denomination.	Standard weight.	Tolerance of weight.	Fineness.	Tolerance of fineness.
SILVER.				
	Gr.			
2 florins	24.691	0.003	0.900	0.003
1 florin	12.345	0.004	0.900	0.003
0.25 florin	5.343	0.01	0.520	0.005

The coinage of 3 florins and 1½-florin pieces has ceased since 1868.

Besides these coins the notes of the national bank (their denominations are 10 florins, 100 florins, and 1,000 florins) and the Treasury Notes, "*Staatsnoten*" (their denomination 1 florin, 5 florins, and 50 florins), are Legal Tender throughout the monarchy.

FRACTIONAL MONEY.

Silver coins Legal Tender between individuals up to 2 florins), 20-kreuzer pieces (.500 fine), and 10-kreuzer pieces (.400 fine), coined 750 and 1500 to the kilogram of fine Silver, respectively.

Copper coins (Legal Tender between individuals up to 50 kreuzers), pieces of 4 kreuzers, 1 kreuzer, and ½ kreuzer.

TRADE COINS.

Silver coins.

Dollars, called *Levantines*, with the imprint of the Empress Maria Theresa and of date 1870; standard weight, 28.064 grammes; standard fineness, 0.833⅓.

Gold coins.

Ducats of 3.4904 grammes weight and .986⅓ fine, with tolerance of .00125 weight and .00175 in fineness.

8-florin and 4-florin Gold pieces identical in weight, fineness, and tolerance with French 20 and 10 franc pieces. The Gold coins (those which have been struck since 1870) are received in Government offices as the equivalent respectively of 8 florins 10 kreuzers, and 4 florins 5 kreuzers of Silver, which corresponds to the ratio of 1 to 15½.

The coinage of *crowns* and *half-crowns* (50 and 100 to the pound of pure Gold) has ceased since 1865.

The mint charges for coining Gold and Silver in the Austro-Hungarian mints (Vienna and Kiemnitz) are as follows:

½ per cent. for the ducats and 8-florin pieces.

1 per cent. for 1 and 2 florin pieces.

2½ per cent. for ½-florin pieces.

1½ per cent. for Maria Theresa dollars.

EXHIBIT B.

NOTE ON THE MONETARY LEGISLATION OF RUSSIA

The unit of Coinage is the Silver rouble.

Weight of the rouble: 4 zolotniks $82\frac{7}{72}$ dolis, of which 4 zolotniks 21 dolis are pure Silver.

A pound of Silver equals 22 roubles $75\frac{5}{9}$ copeks.

The fineness is 0.868.

Tolerance: 3 dolis.

NOTE.—1 zolotnik = 96 dolis = 4.266 grammes.

FRACTIONAL SILVER COINS.

50 copeks, tolerance: $2\frac{1}{2}$ dolis.

25 copeks, tolerance: 2 dolis.

GOLD COIN STRUCK IN RUSSIA.

Half-Imperial.

Value: 5 roubles 15 copeks.

Weight: 1 zolotnik $51\frac{77}{775}$ dolis, of which 1 zolotnik 39 dolis are pure Gold.

Fineness: 88 zolotniks pure Gold to 96 zolotniks of alloyed Gold, or 0.9166.

Tolerance: 1 zolotnik to 1,000 pieces, or $\frac{3}{4}$ dolis to each piece.

The pound of alloyed Gold equals: $62\frac{26}{43}$ half-imperials.

Russian Ducats.

Value: 3 roubles 9 copeks.

Fineness: 88 zolotniks.

Weight: $88\frac{4}{71}$ dolis, of which 8 pure Gold.

Ducats of Holland.

Value: 2 roubles $93\frac{1}{3}$ copeks.

Weight: 78.528 dolis, of which 76.892 are pure Gold.

Fineness: 94 zolotniks pure Gold to 96, or 0.9791.

Tolerance: $\frac{1}{4}$ dolis to each piece.

NOTE.—There has been no coinage of Dutch Ducats since 1869.

SILVER TOKENS.

Pieces of 20, 15, 10, and 5 copeks.

Fineness: $\frac{4}{9}\frac{3}{6}$, or 50 per cent. of the real value.

This money is Legal Tender between individuals up to 3 roubles, and is received in any and all sums in Government offices.

COPPER TOKENS.

Piece of 5 copeks, weight 3 zolotniks, 80.640 dolis.

Piece of 3 copeks, weight 2 zolotniks, 29.184 dolis.

Piece of 2 copeks, weight 1 zolotnik, 51.456 dolis.

Piece of 1 copek, weight, 73.728 dolis.

Piece of ½ copek, weight, 36.864 dolis.

Piece of ¼ copek, weight, 18.432 dolis.

Legal Tender between individuals up to 3 roubles, and receivable in Government offices for any sum.

The State alone coins Money.

Any one can bring metal to be converted into Money.

NOTE.—The coinage of Silver for individuals was suspended by the law of September 9, 1876, excepting the amount of Silver Money needed for trade with China.

No charge is made for Coinage.

If the fineness of the Gold brought to the Mint is below the Standard (that is to say, from 88 to 64 zolotniks in 96) a charge is made in proportion to the quantity of fine Gold required.

For refining auriferous Silver from the mines of the Altaï, a charge is made of 10¾ copeks to the pound of alloyed Silver; for Silver from the mines of Nertchinsk, 11 ¼ copeks; and for Silver from other mines, 22¾ copeks.

For the purification of brittle Gold, unforgeable and largely mixed with other substances, 2 roubles 86¾ copeks are charged for any pound of alloyed Gold.

For the purification of argentiferous Gold, a charge is made of 2 roubles 86¾ copeks in Gold, and 2 zolotniks 88 dolis of pure Silver for each pound of fine Gold contained in the metal.

EXHIBIT C.

THE SCANDINAVIAN COINAGE SYSTEM.

BY DR. O. J. BROCH.

The three Scandinavian kingdoms, Norway, Sweden, and Denmark, have concluded between them a monetary Treaty, based upon the employment of the Single Gold Standard and on a common System of Money of account; Gold moneys, and fractional moneys in token Silver and in bronze.

The monetary unit is expressed by the *Krone* (crown), divided into 100 *öre*.

The Gold coins are of the Standard of $\frac{9}{10}$, that is to say, of 9 parts Gold with 1 part copper.

Two kinds of Gold Money are coined: those of 20 crowns and those of 10 crowns—124 pieces of 20 crowns, or 248 pieces of 10 crowns—are made out of a kilogramme of fine Gold.

The weight of these pieces should therefore be, respectively, $\frac{1000}{124} \times \frac{1}{9} = 8.96057$ grammes, and 4.48029 grammes.

Of fractional pieces there may be coined pieces of 2 crowns, 1 crown, 50, 40, 25, and 10 öre. The following table gives the fineness, the gross weight, the net weight in fine Gold or fine Silver; lastly, the diameter of all these coins:

Metal.	Value of the coins.	Fineness.	Gross weight in grammes.	Amount of pure gold or silver, in grammes.	Diameter in millimeters.
Gold	20 kr.	0.9	8.9606	8.06452	23
	10 kr.		4.4803	4.03226	18
Silver	2 kr.	0.8	15.000	12.000	31
	1 kr.		7.500	6.000	25
	50 ore.	0.6	5.000	3.000	22
	40 ore.		4.000	2.400	20
	25 ore.		2.420	1.452	17
	10 ore.	0.4	1.450	0.580	15
Bronze	5 ore.	95 copper.	8.000	.....	27
	2 ore.	4 tin.	4.000	.....	21
	1 ore.	1 zinc.	2.000	.....	16

The tolerance of fineness for the Coinage of the Gold coins is 0.0015; for weight, 0.0015 for the piece of 20 crowns, and 0.002 for the piece of 10 crowns. But besides this, no 10 kilogrammes of Gold coins (1,116 pieces of 20 crowns or 2,232 pieces of 10 crowns) must differ more than 5 grammes from the Standard weight; there is thus an average tolerance in addition which does not exceed the limit of 0.0005.

The Gold coins cease to be Legal Tender between private individuals when they shall have lost by wear more than $\frac{1}{2}$ per cent. of their weight, but as long as by wear they shall not have lost more than 2 per cent. of their legal weight they are not only Legal Tender in Government offices, but each of the contracting States is bound to exchange the pieces worn more than $\frac{1}{2}$ per cent. for such Gold coins as have legal currency between private individuals. In Norway and in Denmark special laws bind the State to receive and exchange for good coins all Gold coins of their imprint which

shall have lost by wear any proportion of their weight greater than ½ per cent. In Norway the National Bank is charged with the duty of weighing every piece of Money which passes through its hands, and sending back to the State every Coin which has lost more than ½ per cent. of its legal weight.

The coins which have been fraudulently diminished in weight cease to have legal currency.

The Coinage is carried on exclusively at the Mints, at Stockholm for Sweden, at Kongsberg for Norway, at Copenhagen for Denmark. It is done by the functionaries of the State, and the Treaty forbids its being left to contractors.

Any person who brings to the Mint Gold, whose quantity, fineness, and other qualities answer to certain conditions, has the right of having it coined on paying ½ per cent. for the pieces of 20 crowns, and ½ per cent. for the pieces of 10 crowns. No seigniorage can be demanded beyond this price of Coinage.

In Norway, the National Bank is bound by a special law to buy every bar of Gold whose fineness is certified in a satisfactory way, paying 2,480 crowns for the kilogramme of fine Gold, after deduction of ½ per cent. for cost of Coinage; the kilogramme of fine Gold is therefore exchangeable at the bank at any time for 2,473 crowns 80 öre. In Norway, in consequence of this arrangement, the bank alone, in practice, has Gold Money coined.

The fractional pieces of Silver or bronze are considered as legal payment only to the amount of 20 crowns for the 2-crown and 1-crown pieces; only to the amount of 5 crowns for the smaller coins of Silver, and only to the amount of 1 crown for bronze Money. In each of the three States public treasuries are established, where any amount of fractional Money which is a multiple of 10 crowns can be exchanged for Gold Money.

The Coinage of fractional pieces of Silver and bronze can be carried on only on Government account. The Monetary Treaty places no limit on this Coinage.

All coins in Gold, Silver, and bronze, coined by virtue of the Monetary Treaty, are Legal Tender in the three Kingdoms under the above-stated conditions.

EXHIBIT D.

I.—NOTE ON THE MONETARY LEGISLATION OF THE UNITED STATES OF AMERICA ON THE PRESENT STATE OF THEIR FIDUCIARY CIRCULATION AND UPON THE COINAGE OF THEIR COINS FROM 1792 TO 1877.

Prior to the Constitution of 1789, the Congress of the Confederation had, in 1786, established the Double Standard, with the ratio of 15.25; fixing as monetary unit the dollar of pure Silver of 375.64 grains, but without establishing a mint.

Upon the adoption of the Constitution the work was resumed.

The *law of the 2d April*, 1792, founded a mint, it ordained:

That Gold pieces and Silver pieces of full weight should have full paying power, whereas pieces which were not of full weight should have only the value of their real weight.

That in all payments the legal value should be one pound of Gold for fifteen pounds of Silver.

That everybody should have the right to have Gold or Silver ingots coined at the Mint without charge.

That the Money of account should be in dollars or units, in "dismes," in "cents," *et* in "milles."

That the fineness of the Gold coins should be $\frac{11}{12}$, with alloy half of Silver; and the fineness of Silver coins $\frac{1485}{1664}$, with alloy of copper.

That there should be coined eagles of the value of ten dollars or units, and containing 247.5 grains of pure Gold; half-eagles, and quarter-eagles of proportionate weight; dollars or units each of the value of a Spanish milled dollar "like the dollar actually in circulation," and containing 371¼ grains of pure Silver; half-dollars, quarter-dollars, dismes, and half-dismes of proportionate weight.

The law also ordained the Coinage of cents and half-cents in copper, but this small Money had no legal paying power.

In adopting the unit, the intention was to conform to the real weight of the Spanish dollars, which then formed an important part of the monetary circulation.

In fact, and in the absence of a special law, the Spanish dollar was probably from the beginning full Legal Tender for all payments expressed in dollars.

The law of the 9th February, 1793, gave full Legal Tender at a fixed rate to the Gold coins of Great Britain, France, and Spain, also to the Spanish dollars, the French crowns, and their subdivisions in proportion.

The Spanish dollar, weighing 17 pennyweights 7 grains, was to be worth 100 cents.

Various other laws gave full Legal Tender at a rate fixed for each of them to the Gold moneys of Great Britain, France, Portugal, Spain, &c.

The French crowns were Legal Tender up to 1827, the 5-franc pieces from 1816 to 1827, at the rate of 116 cents per ounce, or 0.933 for each piece of the weight of 16 pennyweights 2 grains.

The law of the 25th June, 1834, gave paying power to the dollars of Mexico, Peru, Chili, Central America, and Brazil, and to the 5-franc pieces of France, at the rate of $0.93, but under certain conditions as to their weight and fineness.

The law of the 21st February, 1857, repealed all the previous laws which had given

paying power to foreign coins of Gold and Silver, and provided that the subdivisions of the Spanish or Mexican dollars should be received in the public offices at a value below their nominal value, and should be melted down at the Mint.

The law of the 28th June, 1834, ordained the Coinage of eagles of 258 grains, of the fineness of .899225; of half-eagles and quarter-eagles of proportionate weights; the ratio thus being 1 to 16.002.

The law of the 18th January, 1837, raised the fineness of the Gold and Silver Money to .9.

The Silver dollar was to weigh at this fineness 412½ grains, and the Gold eagles 258 grains; the ratio between the two being 1 to 15.988.

The law of the 21st February, 1853, withdrawing the right of private individuals to have Silver pieces of value less than a dollar coined at the Mint, reduced the weight of this fractional money to 8½ per cent., and limited its paying power to 5 dollars.

The Coinage of Silver dollars remained free, and the fractional pieces of Silver of the old fineness retained full paying power.

This law ordained also that private individuals should pay as charge for Coinage ½ per.cent. alike for Gold and for Silver.

The law of the 1st April, 1873, inserted in the Code (*Revised Statutes*) of 1873–1875:

Reorganized the management of the Mint.

Enlarged the proportion of Silver in the fractional pieces to harmonize them with the metric system (2 half-d =25 grammes of Silver 0.9 fine), without making mention of any dollar (except the *trade dollar* of 420 grains 0.9 fine, manufactured for the trade with China).

Reduced the charge of Coinage for private individuals to ½ per cent.

And ordained that the Gold dollar should be "the unit of value" and that the Gold coins should have unlimited paying power and that the Silver coins should have paying power up to the amount of 5 dollars..

The trade-dollar, after having been invested with paying power to this amount, was deprived of it by the law of the 22d July, 1876.

The law of January, 1875, reduced the charge to be paid by private individuals for the Coinage of Gold moneys in such a way that they need only pay for the alloy of copper.

The law of the 28th February, 1878, *the Allison bill*, ordained—

The limited Coinage (2 millions per month at least, 4 millions at most) on Government account of Silver dollars of 412½ grains of the Standard of 0.9, and gave them full paying power, except in case where it is strictly stipulated otherwise in the contract.

The measures to be taken with a view to the meeting of an International Monetary Conference.

And authorized the issue by the Treasury on the deposit of coined Silver of Silver certificates of deposit in denominations of 10, 20, 50 dollars, &c.

The law of the 3d March, 1863, authorized the issue by the Treasury, on the deposit of Gold, coined or in ingots, of Gold certificates of deposit in denominations of 20, 50, 100 dollars, &c.

All certificates of deposit, Gold or Silver, are received by the public Treasuries.

The law of the 14th June, 1875, ordained that on and after the 1st January, 1879, the Secretary of the Treasury should redeem in coins the *Legal Tender notes* of the United States then outstanding which should be presented for repayment in amounts of 50 dollars and upwards.

The notes are not Legal Tender for the payment of customs duties nor for the payment of interest on the public debt.

II.—STATEMENT OF THE CIRCULATION IN THE UNITED STATES.

The official reports being laid before Congress at its meeting at the beginning of December of every year, there are as yet no documents in hand for the current year.

The amounts and denominations of Paper Money (*Legal Tender*, or *greenbacks*) and of

the notes of the National Banks were, on the 1st November, 1877, according to the report of Mr. Knox, Comptroller of the Currency.

Denomination.	National bank notes.	Legal-tender paper money.	Total.
1	$3,800,456	$24,806,459	$28,606,915
2	2,282,884	24,600,544	26,883,428
5	93,504,900	52,932,148	146,437,048
10	98,312,850	63,146,861	161,459,711
20	65,454,500	60,836,495	126,290,995
50	22,255,100	30,108,715	52,363,815
100	28,800,000	30,176,670	58,976,670
500	1,203,500	34,752,500	35,956,000
1,000	257,000	34,123,500	34,380,500
Total	315,871,190	355,483,892	671,355,082

Of these amounts there were, on the 1st October, 1877, in the National Banks:

Greenbacks	$66,900,000
National Bank notes	15,600,000
Total	82,500,000

According to the report of Mr. James Gilfillan, Treasurer of the United States, there were on the 30th September, 1877, in the Federal Treasury:

Greenbacks	$82,823,720
National Bank notes	14,109,541
Total	96,933,261

On April 20, 1876, there were outstanding of fractional notes, denominations of 50, 25, 15, and 10 cents, without Legal-Tender power, but convertible in the public offices into greenbacks and receivable for the payment of certain taxes, &c	$41,508,737
Up to the 31st October, 1877, there had been retired	23,156,162
Which leaves outstanding	18,352,575

Between 14th January, 1875, and the 21st October, 1877, there have been retired:

Greenbacks	$27,509,108

STATEMENT OF COINAGE.

[An extract from the book of Dr. Linderman.]

	Gold.	Silver with full legal-tender power.	Silver change.	Small change.
1793 to 1834	$11,825,890	$36,275,077 90		$658,591 58
1834 to 1853	224,965,730	42,938,294 00		787,885 81
1853 to 1873	544,864,921	5,538,948 00	$57,443,769 20	9,979,361 16
1873 to 1877	201,503,154		42,094,852 30	1,458,865 00

Before 1853 more than half the Coinage of Silver was in half-dollars.

From 1873 to 1877 $24,381,350 trade-dollars were coined.

The stock of the precious metals (coin and bullion) in the United States was estimated approximately by Dr. Lindermann, Director of the Mint:

For the 30th June, 1876	Gold	$151,500,000
	Silver	30,000,000
	Total	181,500,000
For the 30th June, 1877	Gold	$192,500,000
	Silver	50,000,000
	Total	242,500,000

S. DANA HORTON.

EXHIBIT E.

EXTRACT from the Report on the Mint of Alexander Hamilton, Secretary of the Treasury of the United States, 1792.*

[As quoted by Francis A. Walker, in his work entitled "Money," p. 269, published in London, 1878.]

Upon the whole, it seems to be most advisable, as has been observed, not to attach the unit exclusively to either of the metals, because this cannot be done effectually without destroying the office and character of one of them as Money, and reducing it to the situation of a mere merchandise. To annul the use of either of the metals as Money is to abridge the quantity of circulating medium, and is liable to all the objections which arise from a comparison of the benefits of a full with the evils of a scanty circulation.

* NOTE.—A translation of the above was printed in the French Journal.

FIFTH SESSION.

FIFTH SESSION.

MONDAY, *August* 26, 1878.

There were present
The Delegates of
Austria-Hungary,
Belgium,
France,
Great Britain,
Greece,
Italy,
Russia,
Sweden and Norway,
Switzerland, and of
The United States of America,
Who were present at the preceding sessions.

The session opened at 1.30 p. m.

MR. MEES, Delegate of the Netherlands, recalled to Amsterdam by his duties as President of the Bank of the Netherlands, presented excuses for his inability to attend the concluding sessions of the Conference.

Mr. GARNIER laid upon the table a note on the Monetary System of Belgium. (Exhibit A, fifth session.)

MR. BARALIS laid upon the table a list of the laws, decrees, and treaties which regulate the monetary system of Italy. (Exhibit B, fifth session.)

Mr. GROESBECK then spoke as follows:

MR. PRESIDENT AND GENTLEMEN: I have nothing to say, here and now, about Single and Double Standards of value. If we can keep an

equilibrium of value between Gold and Silver, all nations will be substantially upon both metals. Gold will be as valuable as Silver everywhere, and Silver as valuable as Gold. It is idle to theorize that this cannot be done. We know it has been done. Throughout the entire past up to 1873, both metals were in equal use as Money, and kept together evenly enough. Now and then, at long intervals, the relation between them was slightly changed, but the change was easily made, and without noticeable embarrassment.

The change last made in Europe, fixing the relation at 1 in weight of Gold to 15½ in weight of Silver, stood the trial of more than three-quarters of a century. In all that time the slight differences in the market value of the metals did not amount to a serious disturbance. At one time one metal may have been at a slight premium; at another time, the other, but their average value was about the same.

It is worthy of notice that throughout the past, and up to the middle of the present century, it was never suggested by any writer or statesman that either of the metals should be generally abandoned because of the difficulty of keeping them sufficiently equalized.

This is the lesson of many centuries, and, theorize as we may, what has been done in the past can be done in the future; and instead of spliting hairs about the Single or the Double Standard, let us rather walk in the light of the experience of thousands of years.

Holding this view, I propose to look at the question before us in its practical aspects only, and as it appears to-day. By a combination of adverse influences that may never again co-operate, we are brought face to face with the momentous question, Shall Silver be dropped out of use as Legal-Tender Money?

I have been pleased to notice, Mr. President, that in the opinion of this Conference, it is not desirable that the use of Silver as Legal-Tender Money should be discontinued. The Monetary Conference held here in 1867 expressed itself in favor of Gold alone. This Monetary Conference, if I rightly understand what has been said, will express itself in favor of both metals. That alone, if we do nothing more, will be a wise advance from the position taken in 1867. While such an expression may be made, we may not be agreed as to the arrangements by which the equal use of both metals may be preserved. It has been suggested that some nations can take one metal and some the other, and so use both. It has been further suggested, elsewhere and here, that Gold was the better metal for the rich, and great, and civilized nations, and Silver for the poor and less civilized, and that the former can take Gold, and latter Silver. Such an arrangement can never be brought about. It cannot be brought about by international agreement. That is clear. Nations will never come together and divide themselves into two classes, one taking Gold and the other Silver. The only other way such an arrangement could be brought about would be through the operations of trade and commerce, and we know enough to be certain that trade and commerce will

never make any such classification. Even now, almost the entire body of what are termed the poor and less civilized nations, is upon Silver alone. But that is not enough. Within a few years there has been some changing among what are termed the great and influential nations from Silver to Gold, and the consequences are before us. Silver is depreciated. Suppose the other great nations, the Latin Union, the United States, and others should go to Gold. In that event, Silver as Legal-Tender Money would be lost to the world, for the remainder of the century; it may be much longer. In a word, we cannot save Silver by any such classification of the metals. Some, I do not say all, but at least some, of the rich and powerful nations must themselves do something. This brings me to the proposition I want to present. It is this:

Shall we do nothing for the present, or shall we act without further delay?

Before noticing this inquiry, allow me to refer to my own country. It is not here holding a large stock of Silver and merely to appreciate it. As yet it has but a handful. There is one other matter which has not been referred to. A little more than a third of a century ago, the United States adopted the relation of 1 of Gold to $15\frac{98}{100}$, say 16, of Silver. We prefer our relation, and I believe if we could all take it to-day, it would be better received and secure a stronger acquiescence, than if we should go to yours. It is not to be overlooked that the tendency has been to a widening rather than to a narrowing of the relation. It has been widened more than once, and the time may have come to make another slight change. However that may be, what I desire to say in this connection is, that if we can agree upon a plan to restore Silver, I take it for granted that all who are parties to the agreement should stand upon the same relation. It may be ours; it may be yours.

In the absence of such an agreement, we shall, of course, adhere to our present positions, and it is unnecessary to decide which would be the better relation. With this statement, that we expect to occupy a position of exact equality with you, if we come to an agreement, allow me to add that we shall be ready to do our full share of any work to be done, expecting all parties to the agreement to do likewise.

Now, Mr. President and gentlemen, is not this an opportunity worthy of careful consideration? I trust the United States may be always ready to do hereafter all that she is ready to do to-day; but in view of the uncertainties of the future, if you are ready, it is well worthy of your patient consideration, that the United States is also ready and now here at this Council Board to act with you.

With these preliminary remarks, I proceed to the inquiry: Shall we do nothing for the present, or shall we act without further delay?

Surely we are all agreed that the condition in which Gold and Silver have been in respect to each other for the past four years has not been good. It has been a condition of instability, of fluctuation, of uncertainty, of derangement. I need not stop to explain to such a body as this, that if we are

prepared to terminate this instability, fluctuation, derangement, we should do so at once. The United States, for reasons local to herself, and which therefore I need not mention, is prepared to act now; if, on the other hand, there are reasons local to the other nations here represented, why they should not act now, it is not for me to consider them, or even refer to them. The nations concerned will do that, each for itself. All that I propose to do is to notice briefly those aspects of the question which are common to us all.

When the Latin Union shut the doors of their mints against Silver, the situation was about as follows:

I. Nearly every one of the important Silver nations had stopped using it, and were upon inconvertible Paper Money. Let me name some of them: Russia, Austria, Italy, Spain, France, and the United States. It was an extraordinary happening, which, it is to be hoped, may never occur again.

II. Another great nation, the German Empire, was moving from the Single Standard of Silver, of which she had a large stock, to the Single Standard of Gold.

III. The demand of the East for Silver, which had always been steady, constant, large, and even insatiable, was suddenly checked. That was another extraordinary happening, which I venture to say had never occurred before and may not occur again for a century.

IV. The increased production of Silver and wild stories of its probable future production.

This was an unprecedented combination of influences adverse to Silver. The demand for it from every quarter suddenly stopped, while the supply of it increased. Under these conditions you shut the doors of your mints against it, refused to make it Money, and of course it became only merchandise. Let us for a moment put Gold in the same situation. Suppose that under apprehensions of too great a supply of Gold all the nations using it should limit its Coinage and close their mints against any considerable portion of it, the portion so rejected would at once become merchandise and liable to depreciation. Gold and Silver with free access to the mints are Money, and, being money, have their value partly fixed by law; when they are excluded from the mints the law is silent about their value, and it is determined by the markets. But I do not propose to argue at this time, and desire only to refer to facts.

The foregoing were the conditions under which the Coinage of Silver was limited. What are the conditions now, and has the time come when we may safely open the doors of our mints to Silver?

I. Russia, Austria, Italy, and Spain are still in suspension, and so cannot help us much to-day. They are not a danger, however, and they are even now a reserve strengthening Silver. But this first condition is greatly changed. France and the United States, two active and powerful nations, are no longer in suspension. This is an important change, and however it may be as to the Latin Union just now, the demand for

Silver is substantially and permanently increased by the present position of the United States.

II. How is it as to Germany? She is still on her journey from Silver to Gold. She started in 1871 and is not through in 1878. It has been a long, toilsome, and costly journey. She began it under the most favorable circumstances. Her debt was very small, and she had in her hand a large extra fund for experiments. Her preparations were ample. The undertaking seemed easy; it is not yet a success. Instead of being an example to be followed, we should rather regard the case of Germany as a warning and an admonition. But what of her large stock of Silver? We know it has been greatly reduced. It has been stated here at $100,000,000. The gentleman from Great Britain estimated it, I believe, at $75,000,000. A banker of this city gave me his estimate a day or two ago, putting it at $60,000,000. I have heard that it might be decided to retain and use a larger amount per head than at first contemplated. Such a policy would reduce the amount for sale. I think we may safely estimate the amount yet for sale as not exceeding $75,000,000. This condition adverse to Silver is now greatly changed.

III. How about the demand of the East for Silver? It is about restored. Let me say, if there is any one factor of the problem we are considering which may be relied upon, it is the regular and constant demand of the East for Silver. I can imagine a glut of Gold, for Gold has no insatiable Asia. I cannot imagine a permanent glut of Silver. As the rivers run into the sea, and yet the sea is not over full, so it will be with the flow of Silver to the vast, populous, thrifty, and industrious East for at least another century. This adverse condition is also changed.

IV. The last of these conditions to which I referred is the increased production of Silver and apprehension of yet greater production. We may now put behind us the apprehension of excessive production, and have only to consider the actual production. A distinguished member of this Conference has put it at $80,000,000 a year, of which, according to his estimate, the United States produced about $39,000,000. I think this estimate for the United States is too high. Of this estimate the Nevada mines produce two-thirds. If they should fail the production of the United States would be reduced to $13,000,000, and the world's production to $54,000,000. (*See Linderman's Report*, 1877—*showing a tendency to decreasing production—pp.* 13, 14.)

We may safely estimate the aggregate production of Silver at not exceeding $72,000,000, with a tendency to decrease.

In a word, all these conditions so adverse to Silver in 1874, when its Coinage was limited, are greatly changed.

With these conditions changed, as I have described, could we now safely open the doors of our mints to Silver Coinage? Is there too much Silver on the market? If so, where is it? Let us look for it. We need not look to the East. What is there and what goes there will stay there for many years to come. Our search, then, may be confined to Europe

and America. It is not in Russia, or Austria, or Italy, or Spain, or Portugal, or the Scandinavian nations. Under the arrangement for free Coinage the Silver of the Latin Union will not be on the market. All, then, in Europe is that held by Germany. How of America? There is nothing there to take into consideration but the yearly production. All we have to consider, then, is the Silver of Germany and the yearly production. Let us take up, first, the yearly production. Say it is $72,000,000. This does not come in one mass, but is produced from week to week and month to month. How much would the entire East take of this? (*See Report on Dep. of Silver, Appendix, p. 24, showing export of Silver to the East from* 1852 *to* 1875, *and see letter about Japan.*)

The East would take, say, $30,000,000; all the other Silver-using nations in North and South America, other than the United States, in Africa and elsewhere, say, $10,000,000. Say $35,000,000, instead of $40,000,000, for the entire East and smaller states referred to. This leaves $37,000,000. How much yearly for watches, plate, knives and forks, utensils, jewelry, and for use in many of the arts, and to supply the decrease of the existing stock by abrasion and loss, say $30,000,000. The small balance could find a place easily and without disturbance. This disposes of the yearly production, and we have but the stock of Germany to provide for. Call it $75,000,000, and let me ask, again, are we not now prepared and able to open our mints to free Coinage of Silver? The Coinage of the United States, under the present law limiting the Coinage of Silver, is now about $9,000,000. She must coin $24,000,000 and may coin $48,000,000. Can we not together, with entire safety, find a place for this $75,000,000? If we really wish to restore Silver, I see no existing obstacle which requires further delay.

Is it not our interest to act at once, if we can act with safety? Will not what we already have, and what may come to us by future production, be increased in value far beyond the cost of taking up the Silver of Germany? A little courage, it seems to me, and the difficulty is surmounted, and the work finally done.

There is a precedent for it just here, full of encouragement.

You all remember the great outpouring of Gold from Russia, Australia, and California. It began about 1850 and came in a great flood. Almost the entire world was then upon Silver. England, with her colonies of Australia and Canada, and two or three insignificant nations, were the only places upon Gold alone. Portugal was yet upon Silver. This flood of Gold poured upon the world about $900,000,000 in the short space of six years, and the ordinary production of Silver went on concurrently, and the nations seemed to be adequately supplied and in no need of this excessive production. Gold had no Asia to take it, and had to find a place in Europe. There was great alarm. A distinguished writer recommended its demonetization. A few nations fled to Silver for refuge; others were braver and wiser, and conspicuously France, with her bi-metallic system. She let her then precious Silver

flow away to Asia, and filled her reservoirs with Gold. The flood subsided, and what came as a danger remained as a blessing.

What if the Coinage of Gold had been limited or suspended at that time? It would have been a great error, resulting in consequences very like to those now upon us. Silver would have been uppermost, and Gold, excluded from the mints, would for a time have been only merchandise, for which there would have been but a small demand. Nine hundred millions of Gold in six years!—a production that has had no parallel in all the past. It was welcomed, rather than rejected, and we put upon it the stamp of law, and made it Money, and so it was saved from depreciation. Seventy-five millions of Silver!—can we not welcome this also, and put upon it the stamp of law, and make it Money, and so save it and our own Silver from the possible danger of further depreciation?

Mr. President and Gentlemen, if there are any causes local to yourselves why you cannot do this now, I shall be sorry. It is not a very great or a very difficult work to restore Silver to its former rank and power, and it seems to me we cannot do it too soon for the general good. Accept it as a certainty that the world will not consent to narrow the basis of credit; the tendency is to widen it. How many money schemes are being constantly devised to take the place of Gold and Silver. They are in part an expression of discontent and unrest, growing out of the present derangement, and they have to me the appearance of a warning against the discontinuance of the use of either metal. Gold and Silver, neither alone but both equally, have endured a trial of thousands of years, and through all the past it was never suggested that they were too abundant.

The first suggestion of such a kind occurred quite recently, when it was recommended that Gold should be demonetized because of excessive production. Alas! if it had been done. The second is now to demonetize Silver. Alas! if it shall be done. It would almost as soon occur to me to strike into barrenness a part of our wheat fields, because now and then their harvests seemed too plentiful, or to desolate some of our mines of coal, iron, and other minerals, because now and then their yield seemed excessive, as to desolate any of the mines of Gold and Silver, because now and then their yield happened to be abundant. The more reasonable apprehension is, that they may at some time fail. On the other hand, population, labor, trade, commerce, and the endless activity of life will never fail, but ever increase, and their demand for these metals will always utilize their utmost production. How, then, shall both be saved? Not by putting the small, and poor, and less civilized nations on Silver, and the great ones upon Gold. Far otherwise. They are to be saved by the co-operation and influence of the great and powerful nations. Must all co-operate? It would be better, but it is not necessary. There are enough here in this council to accomplish the result.

MR. FEER-HERZOG, on being called upon to speak by the president, said it would be difficult to reply off-hand to the learned address, so full of figures and so extended, which had just been delivered, and which might justly be considered as a memoir on the question. He wished only to be allowed to touch some of its essential points, and to endeavor to refute them.

The honorable Delegate from the United States had undertaken to demonstrate that Silver was to play in the future the same *rôle* as in the past and had combated the opinion expressed by himself, that the monetary metals should share the world between them. He had laid down as a general thesis that these two metals ought to be and might be everywhere bound one to another by a fixed ratio, which should be not only national but international. In support of this theory he had drawn from certain facts arguments the value of which it was first necessary to consider. He had in some sense made it a reproach against the Latin Union, and in this respect there was some analogy between his opinion and that of the English Delegates, that it had in 1874 shut its doors to Silver, and thereby contributed to the fall of that metal in all the markets of the world.

Now, on this first point he felt bound to declare plainly that the states of the Latin Union, acting under full and entire responsibility for their proceedings, were entitled at that time to consider their own interests exclusively. Their urgent, imperative interest lay in guarding themselves against the invasion of a metal already depreciated. They had therefore the right, and it was their duty, to protect themselves. If the limitation of the mintage of Silver had not been decreed, the German monetary reform would have been effected at their expense; all the Silver of Germany would have been poured into France, and not in several years, but in several months, a billion of Francs, in Thalers and Florins, would have taken the place over the area of the Union of a billion of Gold. By virtue of what principle could it be asserted that the States of the Latin Union ought to bear the cost of this operation and alone undergo its consequences? Were the people of England or of America in possession of a privilege by virtue of which the monetary system of the Latin Union must be regulated to their advantage, and so in such a manner as to insure profit to them? Evidently not, any more than the subjects of the Latin Union had a vested right in the monetary system of England or America. In such a case every State or group of States had only to consult its own convenience; its interest alone determined its right. In 1871 and 1872 the mintage of Silver was virtually suspended in the States of the Union. The public had only 5 millions francs in French dollars coined at the Paris mint, and 33 millions at Brussels; in other words, an insignificant sum. Then all at once, the following year, 1873, 154 million francs' worth were coined at the Paris mint, and 111 millions at Brussels. In the presence of such an event and of the danger it revealed, how could it be alleged that the

limitation of mintage had caused the fall, or that it was not a legitimate measure of defense? Let it be clearly understood, then, that in the existing state of international relations, the restrictive measures taken by the Latin Union in 1874 and the following years were measures the character of which was not open to reproach, and which could not be correctly appreciated except from the exclusive and special standpoint of the States which by common accord had adopted them.

This first point being thus reserved, and excluded as it were from the discussion, he would pass on to the examination of the reasons upon which Mr. Groesbeck had rested his thesis as to the future of Silver, viz: 1. The increasing demands of India; and, 2, the decrease in the yield of the mines.

As regards the first point, he would observe that if the needs of Asia had of late increased owing to certain accidental circumstances, there was a fact overriding that of the increase of these needs, viz, the very fact of their variability, and from this fact no other conclusion could be drawn than that Silver was a metal the value of which was necessarily subject to unforeseen fluctuations of rise and fall which would constantly affect that alleged fixed relation of value which it was vainly proposed to establish between the two metals.

As to the second point, it was not without a certain surprise, he said, that he had heard Mr. Groesbeck predict with so much confidence the early exhaustion of the Silver mines, especially of the Nevada mines. It was true that the working of these mines had extended at many points to depths where the want of air and the accumulation of water rendered it difficult and costly; but was it not known that the creation of the Sutro Tunnel, now completed, was about to restore its original activity to the Comstock mine? For his own part, all the information reaching him from America suggested to him an opinion contrary to that of Mr. Groesbeck, and did not allow him to believe in a speedy diminution of the production of Silver.

The Nevada mines were, moreover, not the only ones to be considered. It was generally acknowledged that the entire chain of the Andes was extraordinarily rich in Silver ore. This had been the opinion of Baron Humboldt and the most competent engineers. Mr. St. Clair Duport, Mr. Laur, and Mr. Simonin, who had explored these countries, were unanimously of the opinion that the volcanic regions of the Cordilleras contained large quantities of Silver ore. These treasures, there could be no doubt, would be some day worked, when the requisite capital had been provided and the indispensable means of communication established; and the more, inasmuch as the production of mercury, which played so large a part in the working of Silver mines, was itself increasing. Already in Peru a railway rising to 11,500 feet above the sea was approaching the celebrated mines of Cerro del Pasco. Those of Bolivia, among which was the now almost abandoned mine of Potosi, also contained wealth which might yet be turned to account. Thus the produc-

tion of Silver was not confined to the mines of Nevada, of Colorado, of Utah. The area of future production was much more extensive than Mr. Groesbeck appeared to think, and the problematic exhaustion of the Silver mines of the United States, even if it could be calculated on, would not arrest the production of that metal in the world.

Was there not, moreover, a contradiction between the facts argued upon by Mr. Groesbeck and the measure he proposed? If, on the one hand, the yield of Silver mines was increasing, and if, on the other, consumption in Asia should decline, there would be ground for fearing an excessive depreciation of that metal, and perhaps it would be necessary to endeavor by every means to prevent it; but if, as Mr. Groesbeck maintained, the wants of India were increasing at the same time that the yield of the mines was diminishing, why so much anxiety respecting Silver, or what necessity was there for sustaining its position in the world by any fresh measure? What protection did it need? Was not its future naturally secured? The production having diminished, the demand being increased, was not a rise in value certain?

In conclusion Mr. Feer-Herzog said that if the Swiss Confederation, which he had the honor to represent, had thought it right to respond with alacrity to the invitation of a great and prosperous and friendly nation, destined to fuller growth, this must be regarded as a testimony of respect and sympathy, but not as showing that the Federal Government in any way shared the view of the American Congress on the monetary question. Far from thinking that the proposal as to the establishment of an international ratio of value was opportune, the Federal Government was convinced in principle that the proposal could not be realized. Far from admitting that all States could be brought under one monetary system and subjected to the same law, he was convinced that the stability and security of the monetary market could result only from the free play of institutions adapted to each State, and that harmony would only prevail if each nation remained free to employ one or the other of the two metals according to its own convenience.

MR. PIRMEZ asked leave to submit some considerations on various points which had been discussed in the Conference.

From the outset of the discussion, he said, the gravity of existing monetary facts has been pointed out. The relation of value between Gold and Silver has in the last few years undergone alterations such as it formerly required several centuries to produce. Never, therefore, could more exceptional circumstances have justified the assembling of this important Conference, in which the United States had taken the initiative.

But, said Mr. Pirmez, by a remarkable coincidence, this extraordinary perturbation, which so well explains our meeting, seems also destined to render it without result, for the force of the economic facts against which we are invited to struggle reveals itself with such clearness that it defies every effort.

Already, in an interesting discussion between Mr. Feer-Herzog and Mr. Horton, has one point of great importance been ascertained, viz, that no serious result can be obtained unless all the Governments of the world adopt simultaneously an identical relation between Gold and Silver. It is evident indeed that if the relation to be established between the metals does not comprise all States in its embrace, the metal whose commercial value exceeds its conventional value will flow into the States remaining free and the depreciated metal will accumulate in the States bound to receive it, and attributing to it by agreement a fictitious value. The coalition which will be formed between a more or less great number of nations will have no other consequence than that of making those nations a field of speculation for the countries which shall not have accepted the relation between the two metals.

Let us suppose that all the States whose Delegates are sitting here adopt one of the ratios indicated—whether the ratio of 1 to 15½ or 1 to 16, it is immaterial. The first thing that will happen will be that Germany will pour her stock of Silver into these States, taking from them a corresponding quantity of Gold at the fixed ratio, viz, 15 per cent. perhaps above the commercial value of that Silver, which would amount perhaps to 50,000,000 francs.

I think that were we to adopt such a measure Germany would have little desire of attending Congresses, for she would find her affairs managed better in her absence than she could have ventured to demand if present.

But we are a long way from the unanimity which would be necessary.

The two largest empires in the world, England and China, will not bind themselves. In what proportions and with what profits would they not exert their power over the countries which should be given up to their mercy—garroted by the invariability of the ratio.

It would thus be by a necessarily incomplete inclosure that we should attempt to confine the bi-metallic currency; now, such an inclosure hampers, but does not inclose; it fails in its purpose because it keeps nothing in. It must, therefore, be abandoned.

It is true that Mr. Horton has very ably replied to this objection: "Our proposition," he says, "is only a wish; we ask you to express the idea that the realization of a general understanding would be advantageous; if it be impossible, it will not be done; but you will at least have indicated the end to be aimed at."

We are thus very nearly in the position of people who see an extraordinary bird soaring over their heads but at such a height that their weapons cannot reach it. A discussion arises: "It is not within range," say some; "let us not trouble ourselves about it." "Let us at least decide," say others, "that we should like to be able to bring it down."

In this case as in that we must choose between those who keep to the practical view and those who demand the declaration of a platonic desire.

It seems to me that the character of our meeting obliges us to adopt the former course. The Conference represents Governments, and Governments pronounce only on what they can convert into fact. What is of purely theoretical determination is beyond them.

But while thus opposing the standpoint assumed by Mr. Horton, I ask permission of the Conference to place myself there also and to inquire whether the realization of the unanimous agreement of the world would really produce the happy effects expected from it.

The maintenance of the value of Silver and monetary stability are what is especially aimed at. To avoid an enormous loss and crisis, to prevent the depreciation of one of the metals, and the variability of the exchanges is what is desired.

But I see at once that gentlemen expect to attain this monetary calm by letting loose on the world the most violent tempest.

Is proper account taken of the formidable effects which would follow the decreeing of the universal ratio?

The present true ratio is not proposed, viz, the ratio of 1 to about 18—a ratio which would force all the countries of Europe having two standards, and the United States themselves, to an immediate recoinage. This, however, would be the least intense part of the crisis.

Fifteen and one-half or 16 would be taken with unlimited mintage; but what a movement of metals! The immense reservoirs of Silver from the East pouring themselves over Germany, over England, over the Latin Union, over the United States themselves! Can a more complete overthrow be imagined?

But this storm, excited in order to procure us calm, is at last allayed. We are, I will suppose, in the definitive position which has been the object of search. Never, under the hypothesis we assume, will a more gigantic effort have been undertaken. For the first time all the powers of the world will have formed a coalition in order to pursue a single object. In view of an economic event which disturbs their tranquillity they will have united to overcome it. Will they succeed?

Here I should find it very difficult to describe, were I obliged to do so, the intensity of the evil to be avoided.*

There seems to be a fear of Silver undergoing such a depreciation that a considerable injury will be inflicted on humanity; it is desired to rehabilitate it, to use the forcible expression of one of the honorable Delegates from the United States; but the alarm inspired by the fall is allayed, as has just been remarked, even by those who extol the use of violent remedies. Mr. Groesbeck shows us that the fears of an excessive production are exaggerated, and he informs us that the price of Silver will recover.

I will not enter into these details of prophetical statistics. I will not even show that Silver will find the same level if the world be divided between the two Standards, or if each State take both.

* See pages 385 *et seq.*

One of two things must happen: either the natural course of economic events will restore its former value to Silver, or it will maintain and aggravate the fall. In the first case, all intervention is useless; in the second, I affirm that it will be futile.

Let me dwell upon the fundamental error which suggests the measure which has been proposed. That error is the belief that it appertains to Governments to call value into existence.

Governments have an almost unlimited power in preventing the creation of values or in destroying them. They are powerless to create or preserve those which are disappearing. By measures which are restrictive of liberty, by clumsy interventions, they may arrest the development of wealth; they are without power to decree it. No doubt a legal fixing of the ratio between Gold and Silver may give to Silver a value superior to its real value, but that value will have been taken from that of Gold which will be depressed exactly in the same proportion. If a paying power be given to Silver greater than that assigned it by the rating of commerce, a less price will thereby be given to Gold. The increased value gained by Silver in having attributed to it a monetary value in lieu of Gold, will be attended as regards Gold by a precisely equal reduction of value. The law may factitiously bring nearer to each other the value of Gold and that of Silver, by fixing an arbitrary relation between them; but the sum of the two values will remain the same. Let me be allowed to make my idea clearer by a comparison. Two bodies are endowed with different motions; by coupling them together they can be made to assume the same motion; those who were looking only at the body which moved the more slowly may fancy that motion has been gained because the speed of this body has been accelerated; but looking at both bodies it will be found that what one has gained the other has lost, and that the quantity of motion has not varied. Now the dynamics of values are not different from the dynamics of bodies; we should have the same result in the hypothesis we are assuming; there would only be a change of the position of value, a change which those who looked only at one of the two factors would take for a gain.

With the authority attaching to his name, and with the clearness which we feel we have a right to expect from the author of the "Theory of Foreign Exchanges," Mr. Goschen has explained to us the position of India towards England, and the difficulties which have been caused by the fall of Silver. If the ideas I am combatting were sound England would possess a very simple means of putting everything right. Let her make the rupees a Legal Tender in England at the relation of 1 to 15½; they would immediately rise, and the exchange of London on Calcutta would approach par. Why does she not do it? Because she knows too well that she would be paying herself with a vain appearance, and that what the rupee would gain the pound sterling would lose. The influx of rupees into England which would drive out the sovereigns, would make English creditors lose exactly what that deplorable measure would have

given to the rupee; and if England fancied the fixedness of exchange saved her the loss she now undergoes she would be like the merchant who is handed a piece of cloth which is too short and who declares himself satisfied, because having had the ingenious idea of shortening his yard-stick he fancies he has received what was due him.

Take other cases and you will always have the same result. Never will you arrive either at increasing a value or at preserving it contrary to economic facts, because from them alone is value derived.

But will the grand federation of Governments at least have succeeded in substituting for the moving waves of natural relations of value the calm surface of an invariable artificial relation? It will have bound the two metals by the strongest link which laws can form, but will that link keep them always at the same distance? No; not even that. It would very soon be perceived that that link can contract or expand; that it is only, if I may venture to say so, of India rubber, and that it will leave them sufficient play to separate and break the dreamed-of harmony.

The two metals will not have the same value in the different countries. The Silver-producing countries, where Silver will consequently be the most plentiful, will be the first where Gold will disappear; these countries will have a Silver currency before the others. The countries, on the other hand, where there is a considerable production of Gold will be the last affected. Speculation will first withdraw the Gold from all the countries where it is worth most. We shall then, for example, see the United States have only Silver Money and Australia have only Gold Money. The uniformity thus pursued will still escape.

This being the case, there will be no fixed par of exchange. If the discrepancy between the two metals be circumscribed within certain limits, it may be affirmed that, within those limits and by reason of the immense speculation which will arise from the option of substituting one for the other, thanks to the legal ratio, the fluctuation will be more frequent than ever. This substitution will be a long operation, but if the ratio be commercially false—and it will be false, because it is this very falsity which is to rehabilitate one of the metals—the other metal will gradually withdraw from circulation; it will find greater use in industrial and artistic consumption; it will be sought by those who make hoards, and will end by being at a premium.

This is what would happen: The grand alliance of all nations, after casting monetary relations into an unprecedented crisis, would lead only to a complete defeat, because it would have attempted to struggle against economic laws as invincible as the forces of nature.

I must here meet an objection of General Walker: "Your Single Standard," he tells us, "obliges you to resort to Money of base alloy; you reject Silver as a real Money, but you are obliged, in order to have Money for small payments, to return to it in the form of Tokens; Paper Money at least represents good Money, whereas this low-standard Money, which

you must put up with, is, in short, only false Money, and it is the force of law alone, which you declare powerless, which gives it its value."

I might first of all point out to the honorable general that the quantity of this Money is limited, so as not to influence the circulation. Germany has fixed it at 10 marks per head of the population; England at still less. But I prefer to notice the mistake into which he seems to me to fall as regards this Money. Nobody thinks of having fractional Coins taken for their intrinsic value; these Coins have a fiduciary character; they are bank-notes inscribed on metal; this character results only in certain countries from a variety of circumstances, but it has been brought into prominence by the recent monetary laws. The German law and the "Latin" Treaty compel the State which has issued tokens to exchange them for real Money; the bearer, therefore, besides the intrinsic value, which is about $\frac{9}{10}$ of the nominal value, has a pledge, which, freed from the metal which bears it, is worth a bank-note.

But this is only a matter of detail, which I notice in order to try to clear up a point which has been frequently obscured. The two metals are necessary, it is said, for the development of credit. To set aside one of the metals, is it not to diminish the stock of monetary material, to arrest the elasticity of credit to which Money gives nourishment?*

Nothing is more dangerous than to confound monetary questions with questions of credit. They are entirely distinct; but, as the oscillations of credit are often revealed by the abundance or scarcity of Coin in large financial establishments, it is too easily imagined that monetary situations, which only reflect the phenomena of credit, are really the producing cause of these phenomena.

I may be permitted in this connection to allude to an observation made by Mr. Horton on the forced currency of Bank of England notes. Mr. Horton, who has so carefully searched for all the facts which appeared to him to support his theory, proves that England abolished Silver Money at about the time she admitted Paper Money, and he infers that, if she had not effected that abolition, she would not have been forced to abandon specie payments.

The two facts may have been contemporaneous, but they have no relation of cause and effect.

Paper Money is a kind of forced loan. England borrowed under that form and under others, in order to face the colossal expenses of the war she maintained for 20 years. Whether, on commencing the war, she had had a stock of Gold or a stock of Gold and Silver of the same amount, did it not come to the same thing? When, during the war, she resorted to loans, would she more easily have purchased supplies because her lenders might, at their choice, have given her one or the other of the two metals? And ultimately, when she resumed specie payments, would not the same effort † have been required to get a value of Silver equal to that which she procured in gold? The absence of Coin was only the

* See page 385. † See page 359.

expression of the lack of capital in the exchequer, owing to its destruction by the war, and, subsequently, the return of Coin marked the creation of resources, when peace had exerted its recuperative action. Monetary questions are entirely foreign to these financial situations.

There is a case, no doubt, in which the double monetary system offers facilities for the liquidation of debts, viz, when those debts have been contracted under the alternative of the two metals, and when one of them is depreciated. I can understand that States whose liabilities are heavy, like Austria or Italy, hesitate to exclude Silver, with which they can acquit themselves more easily than with Gold, and object to choosing the more burdensome mode of payment. But two observations arise here: The first is, that the debt will be paid more cheaply if use is made not of both metals; but of one only which proves that the duality stands for nothing in the facility of payment appealed to. The second is, that this facility comes solely from the original relation between the value of the two metals being disturbed, which shows that if the vaunted fixed relation could be established, the facility would disappear. It is thus—strange contradiction!—by the advantage discovered in the rupture of the equilibrium that the stability of the equilibrium is defended. If it be really desired properly to appreciate the influence of the two systems of the Single and Double Standards, they must be weighed separately, without entangling an antecedent Double Standard in the establishment for the future of a Single Standard.

On comparing the two systems apart, I cannot understand how credit would have to suffer from the monetary system resting on unity of metal.*

Has the credit of mono-metallic England been less than that of bi-metallic nations?

But what constitutes credit? Two elements chiefly: abundance of capital and security for its investment.

Is it possible to conceive that the Double Standard favors the production of capital? How should there be more lands under cultivation or lands better cultivated, more machines, more powerful engines, or more energetic and intelligent toil, because the Money in circulation is of two colors? Neither Gold nor Silver create wealth; they are both *per se* devoid of productive force; they are only representative *equivalents*. How should this image, however real it may be, influence what is necessarily outside of it and independent of it? Would it be confidence which would be increased by the Double Standard? But it diminishes instead of increasing the security of the money-lender. For the certainty of receiving exactly what he gave, it substitutes the alternative of payment in two kinds of Money; he lends Gold, and it is held that he can receive only Silver. Let us seek to recognize this fact: governments have but one means of securing the development of credit, viz: to free it from the impediments with which not long ago their unintelligent anx-

* See pages 388 *et seq.*

iety strove to embarrass it. Let them leave everybody free to direct and employ his activity in the path pointed out to him by his interest; that interest will be sure to be clear sighted. Let them avoid trying to control economic facts by arbitrary measures, always ineffectual for good and perilous to the security of rights. Let us go to the root of a fixing of a legal ratio between Gold and Silver like that proposed to us, and what shall we find? A law of *maximum* or *minimum*, the obligation of giving a weight of Gold for a smaller weight of Silver than that indicated by freedom of trade, or, if you prefer that way of putting it, the right of the holder of Silver to obtain more Gold than the Silver he presents is worth. Why should this taxation be more legitimate than that which in evil times was attempted to be imposed upon corn?

Gentlemen, said Mr. Pirmez, in conclusion, the observations I have had the honor of submitting to your attention induce me to think that the propositions put before us cannot be accepted. But if I do not expect practical measures to issue from our Conference, this gathering, nevertheless, seems to me a happy precedent. It proves—and this is a general result more important than the specific resolutions which might have been adopted—how easily a number of nations can assemble together to discuss the interests which are common to them. I doubt not that this precedent will bear fruit; but if I may be allowed here to express a desire which will be in harmony with the tendencies of the great and free Republic which has convened us, it is that the labors of future Conferences, whatever their object, may be directed, not with a view to government interference, but by liberal aspirations. There still exist in the world—and I do not think a single country is exempt from them—a multitude of measures, restrictive of liberty, often more injurious to those maintaining them than to those against whom they are aimed. It is to make them disappear that the combined efforts of nations should tend.

COUNT RUSCONI said that, as for himself, he would not indulge in any academic argument. He should have liked to see the proposition of the United States taken up on its practical side. That proposition was in itself excellent; he felt bound to express his gratitude to the government which had submitted and to the Delegates who had supported it. It had produced a considerable effect in Italy as soon as it became known, for it had shown that the bond of solidarity uniting the nations in the monetary field was admirably understood on the other side of the Atlantic.

The object proposed to the Conference consisted in establishing by an international agreement a fixed ratio between the value of Gold and Silver Money. Now, nobody could deny that this ratio in fact existed; it had been maintained in different countries at different periods of history, and notably at present in the States of the Latin Union. It was in no way necessary that this ratio should be universal—sufficient that it was international. It would suffice, as he had said at the last session,

and would repeat, that France and England should adopt it, to induce many other States in turn to adopt it. It was said that the German Empire would never rally to it. This was to be regretted, no doubt, but after all would this prevent the measure from producing great results? Certainly not. Germany would realize a profit of some millions of francs, it was true, but the state of the monetary market would be singularly improved for all the world.

The Italian Delegate had previously dwelt on the disastrous effect which the demonetization of Silver would have on various States. He would not revert to that subject, but speaking in behalf of his government, and as representing the interests of Italy, he could not help urging the Conference once more, instead of touching only theoretically on the surface of things, to come face to face with the proposition of the United States, to examine it from the practical point of view, and to consider in what degree it could be realized. When gentlemen declined the task of establishing a durable link between Gold and Silver as impracticable, it seemed to him that they were making a willful confusion of ideas; they confounded the metal remaining merchandise with the metal become Money by mintage, viz, by an operation of a legal character. As he had already said, the law alone made Coin.

That the value of Silver as merchandise varied according to the demands of the market was possible, and he admitted it, but the value of minted Silver in relation to minted Gold did not vary as long as the law preserved its paying power. The action of law was therefore in no way powerless, as Mr. Pirmez maintained, for the creation of a value or for its preservation.

The fixed value of Money was an immediate consequence of the law. Mr. Pirmez had compared the legal ratio between the two Moneys to those laws of *maximum* which had left such mournful recollections in history, but this comparison did not seem to him accurate. Let the law pretend to fix the value of an article of consumption, or establish a fixed ratio of value between two articles of consumption—for instance, between silk and cotton, between wheat and coal—and it would not succeed; it would be an arbitrary and futile act, because it would uselessly attempt to control the nature of things. But for the State to decree a ratio of value between two Coins—one Gold, the other Silver—which were dependent on it, which were both its creation as Money, and to which it alone had the power of giving paying power, this was within its domain; it acted upon its own creature; in no sense did it perform a vain work. And the best proof of this was that it did it every day.

Count Rusconi in conclusion expressed a desire that the Conference should be distinctly called upon by the United States Delegates to pronounce categorically on this question: Is the fixing of a ratio of value between Gold Money and Silver Money possible or impossible?

SIR THOMAS SECCOMBE stated that the opinions of the English Delegates on the question submitted to the Conference had been so fully ex-

plained by his colleagues, Mr. Goschen and Mr. Gibbs, that it only remained for him to say that he entirely adhered to the views they had expressed.

As for the establishment by an international agreement of a fixed ratio between Gold and Silver, he thought the discussion had clearly demonstrated that this measure could not be classed among practical questions.

Silver, as was known, was employed for artistic and industrial objects, as well as in the commercial transactions of the world, and the qualities which fitted it for these uses were not found in another metal. Silver consequently must always have a tendency to resume its natural position in relation to Gold, though that position and the price of that metal in the market might sometimes be materially modified by the expansion of the supply or the demand. This was an evil which might be seriously aggravated, as had been shown, by changes in the monetary laws of different nations, but he did not believe that any resolution adopted by this Conference could effectually mitigate that evil, inasmuch as every nation, as regards its monetary system, would always be influenced by what might seem to its government most conformable to the national interest.

MR. HORTON hoped that the Conference would permit him, in the first place, to make reply to certain strictures which Mr. Pirmez had just made upon his views as expressed at the last session.

The distinguished Delegate of Belgium, said Mr. Horton, has compared the monetary problem laid before the Conference to a bird which is supposed to be soaring over our heads at a great height, a height so great that, in his view, the bird is beyond our reach.

I accept, for the moment, his comparison. We are met here to decide whether we ought to fire together at this bird, whose destruction it is our mutual interest to accomplish. But gentlemen say "it is not worth while discussing the question; it is impossible to kill the bird." And why is it impossible, I ask? "Because," they answer, "our guns are not loaded."

To which I say, Why not load your guns?

Is it not your interest to do so? Here is the real question—an entirely practical question—which has not been answered, and yet a full reply to it would solve all the questions which I had the honor to suggest at the last session.

This powerlessness of which gentlemen speak is not a real lack of power, and in any case it is not shown to exist. It has been said that a goodly number of States will not consent to enter into the arrangement proposed. Very well; but are they right in not consenting? Is it really their interest not to do so? Here is the point which it is necessary to prove. It cannot be said that of a proposed arrangement that it is in its very nature impossible, merely because one or more parties say that

they will not enter into it. Nor does the fact of the refusal prove that the arrangement is not an excellent one.

But to continue, Mr. Pirmez adds a meaning to our proposition which does not belong to it.

It has never entered into our thoughts that the proposed international relation between the value of the two metals must be adopted by the entire world. We have no idea in the United States of making war upon China to introduce the Double Standard into that Empire, and so likewise as far as the Indies are concerned our intentions are eminently peaceable. For my part, I do not know of a single publicist who ever did regard the universal Double Standard as a probability, and as for the idea that it is not possible to obtain a serious result, except by the co-operation of all the governments of the world, it is absolutely contrary to the opinion which I have endeavored to express.*

If, then, Mr. Pirmez only regarded the proposition of the United States inadmissible because of the universality which he gratuitously attributed to it, I am bound simply to say that his reasoning is weak in its foundation.

But he has put forward another objection. We are asking of governments, he says, the accomplishment of a task which exceeds the measure of their powers.

The State, in Mr. Pirmez's view, can easily destroy a value. It cannot create or preserve one. The value of the two monetary metals, as well as that of all other objects, is beyond the jurisdiction of the State, and it is of no use for the State to regulate it.

To this conclusion of Mr. Pirmez I will content myself with opposing Mr. Pirmez himself. He has told us, as Mr. Feer-Herzog did, that if the States of the Latin Union opened their mints to the coinage of Silver they would put Germany in condition to sell her stock of Silver.

Monetary laws, then, can create a demand. Now, demand is a decisive factor in the value of things, and is a cause of the production of things which possess value. Does it not appear, then, that States, by their laws, can create values and preserve them?

I recognize, as Mr. Pirmez does, that legislation does not directly create wealth; but certainly it assists in its creation. To bring about a rise in the value of Silver is not absolutely to create wealth. The rise in Silver may, at the same time, imply a corresponding fall in the value of Gold or in the price of commodities; but it is not the less true that legislation does exercise a considerable influence in the production of wealth.

Our honorable colleague has said, in speaking of bank-note issues and of the nature of credit, that laws are all-powerful for evil. This is true of bad laws, but the good laws, those upon which are founded the stability and the security of economic and social relations, are they not equally

*Omitted in the official journal.—In absorbing the greater part of the one metal against which are directed the prejudices of the Western World, Asia facilitates the establishment of that *quasi*-universal Bi-metallism of the Western nations which is the aim of the Conference.

powerful for good? Everywhere there are laws; that is to say, there is some Government interference with the relations of man in society. Would mankind continue to work, to produce, without this interference, this regulation? Certainly not. Labor would be at a stand-still the day that laws ceased to guarantee the future Money value of labor, of commodities, of property. To create this security, this confidence in the future—is not this to assist in the creation of wealth? The State, I admit, does not itself labor, nor does it produce; but it is the necessary ally and co-worker of those who do work and produce, and hence it has its part in the production of wealth.

We do not, therefore, demand of the State anything that is beyond its power or that is outside of the nature of its mission, when we ask of Governments that they give to the relative value of the two Money Metals a permanence, a stability, which they now lack, and which would be in the future a security for labor and an encouragement to production. *

Another portion of Mr. Pirmez's address calls upon me for answer. In speaking of the monetary crisis under which England suffered at the beginning of this century, I had no thought of saying, as Mr. Pirmez seems to suppose I did, that the suppression of Silver Money in England had been the cause of the forced currency of bank-notes. In this matter the dates speak for themselves. It may be read in all the books treating of the matter, that the Suspension of Cash Payments by the Bank of England took place in 1797, while this law, which has been almost ignored, and to which I called the attention of Mr. Feer-Herzog at our last meeting, was only passed the year after, in 1798.

It was, however, only a few years afterward that the Paper Money fell below par. The question which I raised was, therefore, this: if Silver had not been suppressed would the Paper Money have undergone the same depreciation? †

This question has more than a merely historical interest. When gentlemen to-day cite the example of England, as they so often do, in support of the mono-metallist theory, it becomes necessary to prove that the exclusion of Silver, decreed by England in 1798, was an experiment that suceeded.

Now to my eyes it is clear that this measure augmented to a considerable extent the evils under which England suffered at that epoch.

England was then, as she is to-day, in commercial relations with all the world, and Silver was Money everywhere and was far more abundant than Gold. It is probable that in many instances and in many places people would have preferred to pay in Silver rather than in Gold. This is the more probable from the fact that at that time the relative value of Gold had passed above the English ratio of 15.21, and that there was besides an extraordinary demand for Gold on account of the wars in Europe.

* See pages 385 *et seq.* † See pages 359 *et seq.*

It is plain that if England had not prohibited the Coinage of Silver the ships that arrived in her ports would have brought a greater quantity of the two metals together than they did of Gold alone; and but for this prohibition of Silver Coinage, all the Silver there was in England and all the Silver that might have come there would have been Money Metal. Of the use of all this England deprived herself voluntarily by force of law. I should find it difficult to persuade myself that in so doing she did not reject an ally whose assistance would have been useful in maintaining her circulation.

Mr. Horton also desired to mention one other point in the address of Mr. Pirmez.

General Walker having said that the system of the Single Gold Standard necessarily implied the presence of a very large quantity of Token Money in the States which should adopt it, the Belgian Delegate replied that the amount of this Token Money was limited to such an extent that it had no importance in the circulation; in Germany, for example, there were only 10 marks *per capita* of the population, while in England the proportion was still smaller. He added that Token Money was in a certain measure only a credit Money, every one knowing that the actual value of it was less than its nominal value, and that as it deceived nobody there was no disadvantage in its use in the country within whose territory this unexportable Money was exclusively employed.

Now, said Mr. Horton, in occupying this point of view does Mr. Pirmez intend to make *tabula rasa*—a clean sweep of existing facts?

It seems to me that in the present state of affairs there is far more token Money in Europe than the honorable Belgian Delegate admits.

If, as is agreed, the essential character of Token Money be that it has an actual value inferior to its nominal value, that it is unexportable, and in domestic exchanges occupies the position of a credit Money, I simply ask whether, as matters stand to-day in consequence of the war made against Silver, all the Silver five-franc pieces of the Latin Union, all the Thalers of Germany, all the Florins of Holland, have not actually become Tokens? As bullion they have a value very much inferior to that which the Law gives them as Coin; they are unexportable, or at least they do not leave the country where, although full Legal Tender, they are employed for small every-day transactions. They have been dethroned and have passed in fact if not in law to the condition of Tokens. In my view, the point made against the Gold Standard by General Walker is therefore established by the actual presence of thousands of millions of francs' worth of Token Money in the metallic stock of Europe, a continent already in a manner partially committed to the Single Gold Standard by the demonetization or suspension of the Coinage of Silver.

I also desire, said Mr. Horton, to make an observation suggested by the remarks of the honorable Delegate from Switzerland concerning the probable future production of Silver. While Mr. Groesbeck has called attention to the patent fact that the yield of the Silver mines now worked is diminishing, and that the working of them is becoming more difficult,

Mr. Feer-Herzog foresees with certainty that new mines, or even the old mines of Mexico or South America, will presently be in condition to pour out waves of Silver over the world. This belief in the imminence of an inundation of fresh Silver has now for a long time, I am aware, been made use of as an argument in favor of the system of the Single Gold Standard; but it seems to me that this conjectural mode of argument does not decide anything. From the moment one takes his stand upon a supposition of this kind, it is not clear that one may not as reasonably prophesy an immediate inundation of Gold as of Silver.

Mr. Horton then directed the attention of the Conference to the expectant and essentially conservative attitude taken by the United States in adopting the Law of February 28, 1878, or the "Allison Bill," as in his view it was proper to call it, after the name of the Senator from Iowa who proposed it to the Senate, as a substitute for the "Bland Bill."

The proposition for a Law called the "Bland Bill" had been, he said, the subject of thorough discussion throughout the country, and the Law of February 28, the "Allison Bill," might be considered as the result of this discussion. By its adoption, Congress in giving to Silver the character of lawful money had not desired to increase the demand for Silver in any very great degree.

It was plain that for a country which possessed a stock of Gold of some two hundred millions of dollars, a stock constantly increasing, and which possessed hardly any Silver dollars at all, it was acting with moderation to ordain the Coinage on Government account of two million dollars of Silver per month as a *minimum* and four millions as a *maximum* amount.

With a Coinage thus limited, it would be long before the stock of Silver in the United States would equal that of the various States of Europe. Switzerland, for instance, which has never, said Mr. Horton, since the formation of the Latin Union, coined Gold, and has only coined five-franc pieces since 1873, the date of the depreciation of Silver, already holds, and without doubt will continue for a long time to hold, a greater proportion of Silver of full Legal-Tender power than the United States. As much might be said of Germany, in spite of five years' demonetization. Holland has a stock of Silver double its stock of Gold. As for France and Belgium, their stock of Silver is counted by the thousand millions of francs. It is therefore to a part of the world exceedingly well provided with Silver, and one which has been thinking for many years of ridding itself of this metal, and has not yet succeeded, that the Delegates of the United States come to propose its rehabilitation.

Why is it that there has been in Europe a desire to proscribe Silver?

The starting point of this proscription is to be found in this English law of 1798 to which I have called attention. The theory of it was set forth in 1805 in the Treatise on the Coins of the Realm of the first Lord Liverpool,* the author of the law of 1798 and the founder of the English system, completed by his son in 1816.

* See page 339.

This theory of mono-metallism, which has its source in a time when science had not been enlightened by the decisive lessons of the experience of our century as to the solidarity of interest of all nations in the matter of Money, has been perpetuated and reproduced in our day in two different forms.

At first it had manifested itself in favor of Gold. Later the excessive depreciation of that metal, in consequence of the outflow from the mines of California and Australia, occasioned such a panic, that a learned economist, Mr. Michel Chevalier, who had applied to the Double Standard the explanation of the "parachute" which has since become famous, proposed to demonetize Gold, in the anticipation that the weight of this metal would become too great for the strength of the parachute. His advice was not followed, and twelve years later the strength of the parachute was not exhausted. Upon the convocation of the International Monetary Conference of 1867, a strange revolution of opinion revealed itself. At that time the discovery was generally made that Silver was heavy, and people believed in good faith that the true way to realize an Universal Monetary Union was to break the tie that kept in union the two monetary metals; in order to facilitate exchanges nothing better was devised than to destroy the par of exchange of the two Moneys by means of which exchanges between different parts of the world were effected, and always will be effected; and by a most unfortunate illusion men were enabled to believe for a time that they were about to quicken production and open the springs of wealth by shaking the confidence of men in values expressed in Money.

It is now proposed, said Mr. Horton, that this confidence, shaken by what has occurred, by the fatal measures which have been adopted in pursuance of these ideas, shall be restored by means of an international agreement, not universal, but one that shall embrace a sufficient number of States and extend itself over a mass of interests sufficiently great, over boundaries so broad, that the basis of the new monetary system shall be comparatively unshakable.

We do not ask, as gentlemen seem to suppose we do, that a variety of different ratios between Gold and Silver shall be re-established or maintained all at the same time, namely, the American ratios of 15 and 16, the former English ratio, 15.21; the ratio of the Latin Union, 15.50; and of Holland, 15.62. On the contrary, it is precisely these differences of ratio that we wish to see disappear. To the conflict which resulted from such differences, we wish to see peace succeed. This desire appears to us attainable, seeing that in our day nations can act together in matters of importance as they could not do in the days when the arguments were formulated which have been reproduced in this Conference against the concurrent use of the two metals.*

* NOTE.—*Omitted in the Official Journal.* For the rest, I have no intention of occupying the time of the Conference in a discussion which can be called theoretical. I merely desire to make a statement here concerning the practical results which have been reached in the preceding debates.

In the course of these discussions no one has been able to deny that it was the Bi-metallic Law of France, placed as she was between the Silver of Germany and the Gold of England, that for more than half a century served as a self-adjusting balance to fix the par of exchange of the two Money metals. Nor has any one been able to deny that the existence of the Latin Union in itself is a proof of the practicability of the work proposed to the Conference.*

It has been admitted that a *doctrinaire* legislation rashly augmenting he demand for Gold and diminishing that of Silver has caused and continues to cause a most pernicious perturbation in the metal market.

In consequence of the fall of the Gold price of Silver, England, as we have been told, has suffered great losses. Germany has sold, at a discount, at considerable cost to herself a part of the Silver which she had prepared herself to dispose of.

The States of the Latin Union, menaced with an inundation of Silver, were unable to protect themselves against this danger except by a measure which is believed to have aggravated the fall of Silver, the evil from which they themselves suffered. Every one has suffered and anticipates further suffering. The enormous sum of full Legal-Tender Silver which is collected in the continental states, notably in the Latin Union, has degenerated, as I have had occasion to remark, to the condition of Token Money. Possessing no longer in reality and for foreign use the value which the the law continues to give it in the country which coined it, the 5-franc piece has become an inexportable Money—a thing condemned by all true monetary science.

This is the situation into which Silver has been brought, and gentlemen content themselves with asking, What is the normal price of Silver?

In our view there is something better to be done. There are measures to be taken which I undertake to call measures of public safety.

Nevertheless, added Mr. Horton, I can well understand that the expectant attitude observed by the United States has been found, for special reasons, to be equally imposed upon certain other States, and that many of their representatives have seen in their official and diplomatic position a motive for not entering into thorough discussion of the propositions submitted to this Assembly. But does not this obstacle to the delibera-

* NOTE.—*Omitted in the Official Journal.*—Who, indeed, would have had the boldness to maintain that the accession of England, or of Germany, with the United States, to the Latin Union, would not have given to the relation of value between the two metals a stability even greater than they enjoyed before 1873?

In comparison with such a situation what do we see? Can any one deny to the demonetization of Silver a fatal influence in the financial, commercial, and industrial history of the years that have passed since 1873? Modern man lives in the midst of obligations; the values of the world have been calculated on the basis of the two metals; the business of the world is based on the future Money value of property, and demonetization, meaning a vast withdrawal of employment for Silver, a vast increase of demand for Gold, is a disturbance of existing values and of existing production.

tions of the Conference fade away before the actual fact of this animated debate in favor of the Single Gold Standard, and against the Double Standard as it was, to which diplomacy has lent itself? Have not the apologists of the *status quo*, for which nevertheless every one agrees a remedy must be sought, already made too much use of the freedom of "academic discussion" to be able to maintain for the Conference the character of a purely diplomatic reunion?

But, however that may be, and independently of any other result, this much has already been gained, that the Conference of 1878, breaking with the traditions and doctrines of 1867, will have inaugurated a new era in the history of monetary science of our time, and that it will in a manner fix the date of the decline of the theories of mono-metallism.

The presence at this reunion of the representatives of the Anglo-Indian Empire is a notable sign of the change which has taken place in men's minds in this regard, and the exposition of views by the chief Delegate of the Government of Great Britain deserves to make an epoch.

In declaring that universal bi-metallism and the universal Single Gold Standard are both utopias, but that the universal Single Gold Standard is an entirely false utopia, and in saying that a propaganda against Silver would be an extremely pernicious thing for every one, even for States which are devoted to the system of the Single Gold Standard, Mr. Goschen, although making due reservation in favor of the maintenance of the monetary system peculiar to the United Kingdom, has placed himself upon bi-metallic ground. As I have stated, the utopias of universal bi-metallism, to which Mr. Goschen made various allusions, are not within the practical objects of the Conference. We have merely to do with the probable effects of the proposed union of the States here represented, and as far as this quasi-universal bimetallism is concerned, Mr. Goschen, holding himself within the limits of his diplomatic position, has not entered into consideration of it.

But upon the utopia of the Single Gold Standard he has spoken fully. He has, it is true, said that England had done more than other nations to maintain the value of Silver in the world, in not limiting the Coinage of rupees in India.

But such a limitation would, as a matter of fact, have compelled the introduction of Gold in India, and, indeed, the Government of India has so expressed itself (Return East India Silver of March 22, 1877*), and would have largely diminished the stock of Gold of the Bank of England, an eventuality against which great interests in Europe are compelled to be on their guard.

It is thus plain that the introduction of Gold into India, without speaking of the rest of Asia, is an utopia, and the consequences of any attempt to realize this utopia would be fatal for Europe and for England.

But have we not the right to say also that the extension of the Single Gold Standard in Europe, in Europe itself, has become an utopia?

*See page 409.

It has been generally recognized as true that what weighs upon the present situation is the mass of Silver which Germany has to sell, and that when Germany shall have sold its Silver, the world will return to a "normal position."

Now, how can the maintenance of this "normal position" be reconciled with the actual introduction or even the dread of the actual introduction of the Single Gold Standard into Switzerland, into Belgium, into Holland, into France? Evidently, gentlemen must have already ceased to have any fear that these other nations will some day undertake to sell their Silver, and thus in their turn set at naught those natural laws for whose resurrection the world is now supposed to be waiting.

I may be here permitted to observe that the present position of England upon the question of Silver, and so likewise that of France, as it is set forth in the statement of the President of the Conference, presents a dramatic contrast to the attitude of the representatives of these two nations in 1867.

Nine years ago a chancellor of the exchequer was able, in the House of Commons, to congratulate his country that France showed herself ready to abandon Silver and to adopt the Single Gold Standard.*

To-day, Mr. Leon Say, speaking in the name of France, with the double authority of his scientific and of his official position, tells us that France is not moving toward the Single Gold Standard, but is awaiting the favorable moment to re-enter into full employment of the Double Standard. The position of England, diplomatically defined by Mr. Goschen, is, therefore, in a manner, the English complement of the attitude of France.

It results from these debates, said Mr. Horton, in conclusion, that the interests of England are opposed to the exclusion of Silver as money from Europe and from the United States. It has been ascertained that England, by great losses, has paid the price of German demonetization; that is to say, of a measure for which she herself had given the example, and that she, as well as the other nations, can only lose by new demonetizations of Silver in the future. Nothing could more completely illustrate the true reasons which called the Conference into existence, the motives of the general weal, which decided the United States to convoke it. Nothing could bring into clearer light the community of interest which unites all the nations in all that concerns their Money; nor could anything more forcibly suggest the necessity that the civilized world should come to an understanding to preserve for Silver its character of of Money and so act that the par of international exchange of the two metals may rest upon secure foundations.

MR. FENTON expressed his intention of offering some observations at the opening of the next session. He added that the Delegates of the United States might perhaps deem it proper to submit to the Confer-

* See page 381.

ence other propositions which might be substituted for those previously formulated by the United States delegation, and to ask for a vote upon them at the proper time.

THE PRESIDENT (Mr. Say) requested that in that case the text of these new propositions should be placed in the hands of the Delegates of the other States, so that they might be able to examine them before the next session.

MR. GROESBECK, in support of the observations he had offered, laid on the table the following documents:

1. Two letters from Mr. Sherman, Secretary of the Treasury, dated the 15th July last (Exhibits C and D).
2. A letfer from Mr. Linderman, Director of the Mint, dated the 19th July last (Exhibit E).

MR. FENTON presented a return of the Coinage of the United States during the fiscal year ending the 30th June, 1878 (Exhibit F).

THE PRESIDENT (Mr. Say) announced that in order to clear up one of the historical points touched upon in the discussion, he would collect and communicate to the Conference the documents from which it appeared that the legal ratio of 15½ dated not merely from the year XI, but was for the first time adopted in France under the ministry of M. De Calonne, in 1785.*

The Conference adjourned to meet again on Wednesday next.

The session terminated at a quarter past 5.

* See pages 254 *et seq.*

EXHIBITS TO THE FIFTH SESSION.

EXHIBIT A.

NOTE ON THE MONETARY SYSTEM OF BELGIUM.

Both the Money of Payment and the Fractional Money of Belgium are regulated in accordance with the treaty of 1865 modified by the interdiction of the mintage of Silver. It is unnecessary to reproduce here the provisions of that treaty, which is well known as constituting the Latin Union.

The conditions of mintage of Gold and of Silver in Belgium are as follows:

The cost of Coinage is 6 francs 70 centimes per kilogram of Gold coins struck, and 1 franc 50 centimes per kilogram of Silver Coin.

The Silver franc containing 5 grams of Silver $\frac{9}{10}$ fine, the kilogram of this fineness is worth 200 francs, and the Mint, deducting the cost of Coinage, gives back for a kilogram of Silver 198 francs 50 centimes of Coin.

If a kilogram of pure Silver which is worth 222 francs 22 centimes, be deposited, the Mint will return 220 francs 55 centimes in specie.

Gold being worth at the legal ratio 15½ times Silver, the kilogram of Gold at $\frac{9}{10}$ is worth 3,100 francs, and for it the Mint will give back 3,093 francs 30 centimes of Gold Coin; if a kilogram of pure Gold which is worth 3,444 francs 44 centimes, be deposited, it returns 3,437 francs of Coin.

The National Bank has the privilege of a reduction of ¼ per cent. on the cost of Coinage, but it receives the metal to be coined at the Mint rate, giving specie immediately in exchange for metal.

Beside the coins mentioned in the Treaty of 1865, Belgium has, as tokens, pieces of nickel of 20, 10, and 5 centimes, and copper coins of 2 and 1 centime. The nickel coins are exchangeable at any time in the office of the Treasury in sums of 50 francs. Nickel coins need not be received for sums above 5 francs, and copper coins need not be received for sums above 2 francs.

EXHIBIT B.

LIST OF LEGISLATIVE DOCUMENTS CONCERNING THE KINGDOM OF ITALY.

A.—No. 788, Law of August 24, 1862, on the unification of the monetary system.

B.—No. 3,037, Law of July 21, 1866, promulgating the monetary treaty between Italy, Belgium, France, and Switzerland, signed in Paris, December 23, 1865.

C.—No. 4,771, Royal decree of December 30, 1868, on the accession of Greece to said treaty.

D.—No. 57 (Second series), Royal decree of February 12, 1871, on the Legal Tender of Gold coins of 20 and 10 francs in the Austro-Hungarian Empire.

E.—No. 2,065 (Second series), Law of August, 1874, on the monetary treaty between Italy, Belgium, France, and Switzerland, signed in Paris, January 31, 1874.

F.—No. 2,651 (Second series), Law of July 17, 1875, on the declaration signed in Paris, the 5th of February, 1875, by the Delegates of Italy, Belgium, France and Switzerland.

G.—No. 3,068 (Second series), Royal decree of April 26, 1876, on the declaration signed in Paris, February 3, 1875, by the Delegates of Italy, Belgium, France, Greece, and Switzerland.

EXHIBIT C.*

TREASURY DEPARTMENT,
July 15, 1878.

DEAR SIR: To that part of your letter of the 12th instant, in which you ask my view of the matters confided in the Monetary Commission, I have some delicacy in replying very fully.

During the Monetary Conference in Paris, when silver in our country was excluded from circulation by being undervalued, I was strongly in favor of the Single Standard of Gold, and wrote a letter, which you will find in the proceedings of that Conference, stating briefly my view. At that time the wisest among us did not anticipate the sudden fall of Silver or the rise of Gold that has occurred. This uncertainty of the relation between the two metals is one of the chief arguments in favor of a monometallic system, but other arguments, showing the dangerous effect upon industry by dropping one of the precious metals from the Standard of value, outweigh in my mind all theoretical objections to the bi-metallic system. I am thoroughly convinced that if it were possible for the leading commercial nations to fix by agreement an arbitrary relation between Silver and Gold, even though the market value might vary somewhat from time to time, it would be a measure of the greatest good to all nations. My earnest desire is that you may succeed in doing this.

You are so well informed upon the subject that it is not worth while for me to enlarge upon it. The statements and documents sent you by the Director of the Mint will give in authentic form most of the material facts which bear upon the question, and your own investigations on the Silver Commission will, I am quite sure, supply any deficiency.

Very truly yours,

JOHN SHERMAN,
Secretary.

W. S. GROESBECK, Esq.,
Cincinnati, Ohio.

EXHIBIT D.

TREASURY DEPARTMENT, *July* 15, 1878.

DEAR SIR: Your letter of the 12th was received during my temporary absence, and I comply with your request with pleasure.

Accompanying this I send you sundry documents, duly scheduled, which contain in detail the law and my views on the resumption question.

Among these papers is a letter from the Treasurer of the United States of date July 6th, showing the exact Coin on hand for all purposes, a careful examination of which will prove to you our ability to resume at the time fixed by the law.

It will be perceived that we have on hand in the Treasury Coin enough to cover all our Coin liabilities of every name and nature, and also 35 per cent. of the aggregate amount of United States Notes outstanding with an excess of $2,474,822. We have

* NOTE TO THE ENGLISH JOURNAL.—Of the following letters, a French translation was printed in the French Official Journal.

also $7,136,529 of fractional Silver Coin which will be used for current expenses. Of the United States Notes outstanding at least sixty millions are held in the Treasury, either as the property of the United States or as special funds for purposes prescribed by law, which cannot readily be diminished. In addition, the Secretary is authorized to sell bonds for the purchase of Coin or Bullion, and he may use United States Notes for the same purpose. Our revenue, both in Coin or Currency, is more than sufficient to pay all current expenses covered by the appropriations of Congress. Considering that the United States Notes are scattered over a vast country, are in great favor and demand and extremely popular, I feel entire confidence in the ability of the Treasury to resume on the 1st of January next, and the leading bankers and brokers of New York are of the same opinion. I know of nothing that can prevent the United States from taking its place among the specie-paying nations at that time, except the possible repeal by Congress of the resumption act, and this I do not anticipate.

Very truly yours,

JOHN SHERMAN,
Secretary.

WILLIAM S. GROESBECK, Esq.,
Cincinnati, Ohio.

EXHIBIT E.

TREASURY DEPARTMENT,
OFFICE OF THE DIRECTOR OF THE MINT,
Washington, D. C., July 19, 1873.

SIR: Acknowledging the receipt of your letter of the 17th instant, I have to inform you that information has reached us through the Department of State that the Empire of Japan has made the Japanese "yen," or trade-dollar of 420 grains, nine-tenths fine, a legal tender throughout the empire, and has also reduced the charge for manufacturing that Coin from one and a half to one cent for each piece.

This is the establishment of a double or bi-metallic Standard on a ratio of 16.28 to one, the practical effect of which will be the circulation of Silver Coin to the exclusion of Gold, until the price of Silver shall advance and become settled at 57¼ pence.

The coining rate of Silver into trade-dollars is 114.28 cents per ounce, 100 fine, which is equivalent, very nearly, to 58 pence per ounce British standard, 925 fine.

The desire of Japan appears to be not only to use Silver as Legal-Tender Money, but to compete with the Mexican dollar in China.

I have the honor to be, very respectfully, &c.,

A. R. LINDERMAN,
Director of the Mint.

Hon. W. S. GROESBECK
(Care of Messrs. Munroe et C., bankers, Paris, France).

EXHIBIT F.*

DOCUMENT PRESENTED BY MR. FENTON.

Coinage executed at the mints of the United States during the fiscal year ending June 30, 1878.

Gold	$52,770,420 00
Trade-dollars	11,378,010 00
Standard Silver dollars	8,600,500 00
Subsidiary Silver Coin	8,339,315 50
Minor coins	30,676 00
Total	81,118,921 50

RECAPITULATION.

Gold	$52,770,420 00
Silver	28,317,825 50
Minor	30,676 00
Total	81,118,921 50

* NOTE TO THE ENGLISH JOURNAL.—A French translation of the above was printed in the French Journal.

SIXTH SESSION.

SIXTH SESSION.

WEDNESDAY, *August* 28, 1878.

There were present:

The Delegates of—

Austria-Hungary,
Belgium,
France,
Great Britain,
Greece,
Italy,
Russia,
Sweden and Norway,
Switzerland, and
The United States of America.

Who had been present at the preceding session.

The session opened at 1.30 p. m.

MR. RUAU communicated two documents relative to the monetary legislation of France, namely:

1st. The Declaration of the King, 30th October, 1785, relating to the establishment of the value of Gold relatively to Silver.

2d. The "Law of 7-17 Germinal, year XI," upon the fabrication and verification of Coins. (Exhibit A, sixth session.)

And also a synoptical table of French Coins. (Exhibit B, sixth session.)

MR. FENTON, in accordance with notice given at the previous session, then addressed the Conference. He spoke as follows:

MR. PRESIDENT: The time for much discussion seems to have passed. In closing the general debate I had intended to summarize the arguments in favor of the propositions contained in the invitation of the United States on the one side, and to answer the objections, as well as I could, that had been urged against it on the other. But I have abandoned the purpose. On the contrary, I will only ask the attention of Delegates for a short time to a few general remarks. The attitude of my country has been well stated by my colleagues. My own individual views do not greatly differ. I hardly need repeat that it seems to us, speaking for the United States, that it is not to be desired that Silver should be excluded from free Coinage in Europe and the United States of America. On the contrary, it is desirable that the unrestricted Coinage of Silver and its use as Money, as unlimited Legal Tender, should be retained where they exist, and, as far as practicable, restored where they have ceased to exist. Further, that the use of both Gold and Silver as Legal Tender may safely be adopted.

First, by equalizing them at a relation to be fixed by international agreement; and,

Secondly, through concert of action, by granting to each metal, at the relation fixed, equal terms of Coinage, making no discrimination between them.

This is what we have deemed proper to suggest to the Conference. We believe it is a solid foundation upon which to build. Once upon it, there will be very little difficulty in reaching forward—not remotely—to practical details. It may be that these details would involve, among other things, an occasional adjustment of the ratio of value of the two Coin metals by the nations employing them. It may be that limited Coinage, for a longer or shorter time, would be necessary; but I will not anticipate the conditions of an absolute understanding between us. I want it to be understood, however, that an agreement to act together, whether the ratio is fixed for an indefinite period or not, and whether the Coinage is free or limited, has no just dependence on the amount of metal produced and the amount used in Coin. This will take care of itself, if we are so fortunate as to fix upon the right principle. The basis of international action being wisely established, the results cannot be erratic or mischievous.

The first necessity of a commercial people is that their standard of value should be accepted by other commercial nations, for one of the chief uses of the precious metals is to liquidate balances with other countries. London being the clearing-house of the world, England from the standpoint of the home government may not in the past have felt in this respect equal interest with the outlying nations. But the real question, after all, for her, as now seems to be conceded, is that which is pertinent

to all commercial nations: What are the terms upon which they will exercise the use of the two Coin Metals? We see that this question has of late given rise to earnest inquiry on all sides. Why is this?

We find ourselves, not alone here or there, but in every country, in some measure, in the midst of financial disasters and industrial depressions. This condition is not disconnected from international exchanges. Prices have been falling and receipts diminishing. Hardships have ensued, and they still continue. The nations have reached a point where they must devote themselves with assiduous care and with the most prudent and sagacious skill to a restoration of a more healthy state. Guide skillfully and wisely as we may, the process of recovery is still toilsome and difficult. Industry is more or less crippled; commerce is partially paralyzed, and the great mercantile interest still checks its busy operations in anxious concern. Not only are these interests to be revived, but most nations have vast indebtedness to pay. And while this is eminently true of most civilized countries, is it not also true that taxation and the necessary cost of living are an overmatch for the profits on industry? At least, I hazard nothing in saying that there is little surplus, except in the new countries which are provided with native riches. Turn to this side or that, we find a depressed condition.

May I refer to one other point bearing upon this view of the situation? All taxes must be paid from capital or income. It is a sound maxim that taxation should not be laid in such a way as to encroach on capital, or, in other words, upon the solid basis of future production. Is not this being done, to some extent, in some quarters? Do you ask the remedy? I answer, in part, as it seems to me, some action in harmony with the general aims of this Conference. It may not be practicable to step forward into formal agreement at this time, but, in my judgment, it would be for the interest of all the States here represented that some expression, at least, should be made distinctly favorable to that object.

I do not say there cannot be too much currency; what I say is, there can be too little Money. I am aware that Money is not needed for its own sake. Apart from being the Standard of value, its great purpose is to serve as the medium of exchange, as the instrument with which transfers are made and indebtedness discharged. Then the question arises, is Gold alone for this purpose amply competent; or can Gold and Silver, joined in fair proportions, any more than satisfactorily perform this work? It is wholly certain that one, or the other, or both must continue to be the basis of commercial exchange. Our Government, speaking through the medium of its legislature—the representative alike of the popular will and the conservative expression of the several States of the Union—declares in favor of both, to the end that the activity and profit of exchange may be reinspired and the prosperity of the people increased.

I will not dwell to consider the full future effect upon production, com-

merce, and consumption of present and further demonetization of Silver. I will indulge in a word only, in addition to the learned and forcible remarks of my colleague, Mr. Groesbeck, upon this branch of the inquiry at the last session. There is, according to most reliable estimates, something over five hundred million pounds sterling of Silver in circulation in the world. The importance of the relation of this money volume to the exchanges of mankind and the industries of mankind will at once be admitted. Indeed, it cannot well be overstated. The annual average production of eight million pounds sterling in 1848, to, say sixteen million in 1876, is equal to only about 2½ per cent. on the stock in circulation in the world during the intermediate period—an amount hardly more than a match for necessary wastage, and for art and ornamental purposes. And yet, the aggregate volume in circulation as Money is so large that the increasing discontinuance of its use as Money might add to present disorders in an incalculable degree. It will be observed in this connection that the two metals are, in the long run, produced in nearly equal quantities in value. This is a significant circumstance. The present value of Gold in the world is estimated at 750 million pounds sterling, and of Silver at 650 million; so, as before said, there are about equal masses of value available for Coinage. Although the annual production of either metal varies considerably, from time to time, it seldom happens that there is an increased or diminished supply of both at once; and thus the variation in the production of both metals is less than the variation in the production of either metal singly. But I pass.

Mr. President, whatever our differences in regard to the propositions submitted by the representatives of the United States, the fact has been signalized by our Conference and discussions that each nation, whatever its own system, manifests a prudent solicitude touching the relation which the two Coin Metals shall hereafter bear to each other. In other words, each nation here represented has shown an interest in the wise regulation of the Money of the remainder of the nations. And I will add, what seems to me apparent, that the current of popular opinion, and therefore, I trust, the official expression of Governments, in a measure, now operates as a check to the impulse of the last few years toward Gold-mono-metallism. So far as this Assembly can token this fact, may I not say that it is seen in the retraced steps of the United States; in the hopeful attitude of France; in the language of England; in the presence here of Belgium, Switzerland, and the Scandinavian States, and in the earnest position of Italy, Austria? It is fortunate for the human race that nations, like individuals, have reason, in the progress of events, to change their position, to modify public policy. To act otherwise would be to affirm that experience was worth nothing. If I correctly interpret the surrounding indications, and I trust I do, it is not too much to expect that this Conference will announce this later result of experience, this later conviction, if you please, in a manner to encourage people in the struggle for prosperity, and Governments in the effort to return to an improved Money condition.

Speaking of my own Government and people, our large domain and diversified interests afford a fair guarantee, even under adverse circumstances, of gradual improvement. The elements of an increase of wealth in our case are quite clear. Our vast districts of yet unsettled fertile territory and immense mineral stores are a part of current history. Indeed, the already augmented wealth of the nation, amounting to more than fifteen times the aggregate of debt, and the incalculable promise for the future, together with the preparation of the Government, settle the question beyond a doubt of our present and prospective ability to resume specie payments and discharge all our obligations.

Just now, on the very day we convened here, the Bankers' Association of the United States, representing immense capital, gave expression to the common feeling and purpose in the following hearty and unreserved manner:

Resolved, That, in the opinion of this association, the near approach of the day appointed by law for resumption of Coin payments and values is to be hailed as an event of the highest significance to the prosperity and welfare of the whole nation, because it is the only means by which industry, trade, and general tranquillity and contentment can be restored to the people. The American Bankers' Association therefore pledges aid and support to the Government in a return to a specie Standard in the transaction of the financial affairs of the country.

Resolved, That the resources of the country, arising from abundant crops in several successive years, the extraordinary mineral wealth, the large credit balance of trade with other nations, and from the rapid development of mechanical inventions and appliances by which productive industry has been facilitated and increased, all happily concur in supplying the necessary means for resumption.

So you will learn from every quarter that our people are a well-disciplined and loyal reserve force, fully committed to the maintenance of the Government and to national good faith. After all, even under these favoring circumstances, it must be confessed it is hard work to pull up—harder than I could wish. We feel that the case could be made somewhat easier by international co-operation in the fuller use of Silver. In the exchanges of trade, in the work of production, in the compensations of labor, and in every business transaction, its freer course is of first importance. Indeed, the question of its free relation with Gold as Money is closely connected with all the varied and multiplied interests of daily national and international affairs.

It is the province of practical statesmanship to secure whatever of beneficent effect may come from the restoration of this metal to an unfettered position. Our people have felt hopeful, and our Government has given official expression of the desire that this Conference would do something to this end, and not only for us, if so much for us, but also for the family of nations. We prefer not, if we could, to stand alone. Our interests are your interests; the interests of our respective nations in this respect are practically identical.

The representatives of the United States, on behalf of their Government, at the outset, at your instance, gentlemen, had the honor to make a brief declaration of the questions for discussion. It was in the spirit

of the invitation to you to meet us in council. We felt assured of your approval; if not of just that, of an expression in some form on your part which would lead us to hope for international agreement and co-operation in the not distant hereafter. I beg you to reassure us, in your own words, if not in ours, and we shall not fail to report to our Government your sense of regard for its broad views and liberal spirit.

In anticipating your decision, I do no more than bespeak the action of the eminent representatives of enlightened and progressive nations.

THE PRESIDENT (Mr. Say) suggested that as the discussion upon the propositions of the Delegates of the United States was closed, an adjournment of the session for three-quarters of an hour was desirable in order that the Delegates of the other States might agree among themselves as to the collective answer which they might wish to make to these propositions.

This advice being adopted, the session was adjourned at 2 o'clock.

It was again opened at 3¼ o'clock.

Mr. GROESBECK requested that the Conference adjourn till the following day, and that the collective response which the Delegates of the European States manifested the intention of making to the American propositions be not laid upon the table at this session, in order that his colleagues and himself might agree beforehand with reference to this response and present their observations upon it.

MR. GOSCHEN stated that he, like many other of the Delegates, would have desired that the Conference should not be uselessly prolonged, since it could form no resolution of a practical and final character.

Notwithstanding this, and in order to give the Delegates of the United States the opportunity of making their views fully known, the sessions had been prolonged from day to day. Although he had made his arrangements for leaving to-morrow, in the belief that the Conference had decided to hold no further sessions, he would be disposed, so far as he was concerned, willingly to accord to the Delegates of the United States the new delay which they requested. But as for the second part of the request formulated by Mr. Groesbeck, namely, that the draft of response to the American propositions be not even laid upon the table to-day, he saw for his part no inconvenience in having them presented just as the American propositions had been, without their being discussed upon the same day; and this seemed to him the more practicable, inasmuch as this draft of an answer had, as he thought he might be permitted to say, been already confidentially communicated to the Delegates of the United States.

The questions submitted to the Conference were very clear, and Mr. Goschen had thought that, as far as he was concerned, it was proper to make an answer to them with equal clearness and precision, that there

might be no misunderstanding as to the views of the majority of the States.

However desirable it might be to have an answer acceptable to all, the English Delegate had been of opinion that it would not be proper to sacrifice the clearness and lucidity of the answer to this desire.

MR. GROESBECK said that, so far as he was concerned, he would have preferred that the American Delegation should have abstained from formulating propositions itself, and should have awaited the result of the deliberations in order, if it were possible, to agree with the Delegates of other States upon the expression of a common view.

MR. GOSCHEN observed that it was very natural that the Delegates of the United States should first formulate their propositions, since it was their Government that had taken the initiative in calling the Conference; and he added that the moment those propositions were presented it was the duty of the Delegates of other States, as far as possible, to put themselves in accord upon a reply to them.

The terms of a reply having been agreed upon, Mr. Goschen asked that it be placed upon the table at the present session, although the discussion would be deferred until the following day.

A conversation now took place between the various members of the Conference, and some of them, especially Mr. Pirmez, Mr. Broch, and Mr. Feer-Herzog, insisted that the draft of a response to the American propositions be at once laid upon the table.

The Conference decides that the draft be laid upon the table to-day, but that the discussion shall be deferred until to-morrow.

The PRESIDENT (Mr. Say) then read the draft, as follows:

Les délégués des États européens représentés à la Conférence désirent exprimer tous leurs remercîments au Gouvernement des États-Unis d'Amérique pour avoir provoqué un échange international d'opinions sur l'importante question monétaire.

Après avoir mûrement considéré les propositions des délégués des États-Unis, ils reconnaissent:

1° *Qu'il est nécessaire de maintenir dans le monde le rôle monétaire de l'argent aussi bien que celui de l'or; mais que le choix entre l'emploi de l'un ou de l'autre de ces deux métaux ou l'emploi simultané des deux, doit avoir lieu suivant la situation spéciale de chaque État ou groupe d'États;*

2° *Que la question de la limitation du monnayage de l'argent doit également être laissée à la libre décision de chaque État ou groupe d'États, suivant les conditions particulières où ils peuvent se trouver, et cela d'autant plus que les perturbations qui se sont produites dans ces dernières années sur le marché de l'argent ont diversement affecté la situation monétaire des différents pays;*

3° *Que, en presence des divergences d'opinion qui se sont manifestées et de*

*l'impossibilité où se trouvent même des États ayant le double étalon de prendre un engagement relatif à la frappe illimitée de l'argent, il n'y a pas lieu de discuter la question d'un rapport international de valeur à établir entre les deux metaux.**

The PRESIDENT (Mr. Say) then gave notice that Mr. Rusconi and Mr. Baralis had a protest to enter against this draft.

The Conference adjourned at 5.15 o'clock.

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* NOTE.—According to the translation officially presented the response was as follows:

The Delegates of the European States represented in the Conference desire to express their sincere thanks to the Government of the United States for having procured an international exchange of opinion upon a subject of so much importance as the monetary question.

Having maturely considered the proposals of the representatives of the United States, they recognize:

1. That it is necessary to maintain in the world the monetary functions of Silver as well as those of Gold, but that the selection for use of one or the other of the two metals, or of both simultaneously, should be governed by the special position of each State or group of States.

2. That the question of the restriction of the Coinage of Silver should equally be left to the discretion of each State or group of States, according to the particular circumstances in which they may find themselves placed; and the more so, in that the disturbance produced during the recent years in the Silver market has variously affected the monetary situation of the several countries.

3. That the differences of opinion which have appeared, and the fact that even some of the States, which have the Double Standard find it impossible to enter into a mutual engagement with regard to the free Coinage of Silver, exclude the discussion of the adoption of a common ratio between the two metals.

EXHIBITS TO THE SIXTH SESSION.

EXHIBIT A.

Documents Relating to the Monetary System of France.

DECLARATION OF THE KING *prescribing fixation of the value of Gold relatively to Silver, and of the proportion between the Coins of the two metals, with an ordinance for a new Coinage of the Gold Coins. Given at Fontainebleau the 30th October,* 1785. *Registered in the Cour des Monnoies the 21st November of the said year.*

Louis, by the grace of God King of France and of Navarre, to all those who shall see these present letters, greeting:

The vigilant attention which we give to all that can affect the fortunes of our subjects and the welfare of our State has caused us to perceive that the price of Gold in commerce has increased within late years; that the proportion of the Gold mark to the Silver mark having remained the same in our realm, is now no longer in relation to that which has been successively adopted in other countries; and that our Gold Coins have at present, as metal, a value superior to that which their denomination expresses, and according to which they are exchanged for our Silver Coins, which has originated the speculation of selling them to the foreigner, and offers at the same time the temptation of a great profit to those who, in contempt of our ordinances, may allow themselves to melt them down.

The injury to various branches of trade which result therefrom, through the diminution, already felt, of the abundance of Gold specie in our realm, has rendered it indispensable to ordain a new Coinage of it, as the only means of remedying the evil, by checking its source; but in yielding to this necessity our first care, and the primary basis of our determination, has been that it should not cause the slightest loss to the holders of our Gold Coins; that it should even become advantageous to them; and, in order to leave no shadow of doubt upon this important subject, we have resolved that the explanation of the whole operation, and the publication of the tariff which presents its results, should clearly manifest its justice and accuracy.

The new Gold Coin will have the same value as the existing Coin; it will also be of the same fineness; there will be no difference except in the quantity of the material, which will be reduced to its just proportion, and allowance will be made for this difference to the holders of Gold specie when they shall bring it to our Mints; our intention being that they gain the profit of the increase in the price of Gold.

By an operation thus equitably directed, the relation of our Gold Coins to the Silver

Coins will be re-established in the measure required by that which prevails among other nations; the interest in their exportation will disappear; the temptation to melt them down will be no longer excited by the attraction of gain; our realm will be no longer prejudiced in the exchanges of metals, and there can result from it neither a derangement in the circulation, nor any change in the price of products and merchandise, since all the values are regulated relatively to Silver, the rating of which will always be the same.

FROM THESE CAUSES and others us thereunto moving, by the advice of our *Council* and of our certain knowledge, full power, and royal authority, we have declared and ordained, and by these presents, signed with our own hand, do declare and ordain, wish, and it pleases us, as follows:

ARTICLE I. Every Gold mark of 24 carats fine shall be worth 15 marks and a half of Silver 12 deniers fine, and shall be received and paid in our *Mints* and *Exchanges* for the sum of *eight hundred and twenty-eight livres twelve sous*, value of the said fifteen marks and a half of Silver at the present price of *fifty-three livres nine sous two deniers* the mark, fixed by the tariff of our Mints of the month of May, 1773.

ARTICLE II. All our Gold Coins at present current, *louis*, *double louis*, and *demi-louis*, shall cease to be current reckoning from the first January next, and shall be received and paid cash in specie, in our Mints and exchanges, reckoning from the day of the publication of the present Declaration, until the 1st April next, on the footing of *seven hundred and fifty* livres the mark, or *twenty-five livres* the *louis*, which shall have lost nothing of its weight by use; excepting that, in case of diminution in the weight, a proportionate deduction may be made on the said price of twenty-five livres; the said term expired, they shall be no longer received except on the footing of *seven hundred and forty-two livres ten sous* the mark; or *twenty-four livres fifteen sous* for each louis that has its full weight.

ARTICLE III. The Gold, as well in ingots as in foreign Coins, brought into our Mints and Exchanges shall be there paid for in proportion to its fineness, on the footing of *eight hundred and twenty-eight livres twelve sous* the mark fine, and *thirty-four livres ten sous six deniers* the carat, conformably to the tariff annexed to these presents, in which the foreign Coins have been brought upon the footing of the said increase.

ARTICLE IV. There shall be coined new *louis* of Gold of the same fineness as those now current; each mark shall be composed of thirty-two *louis*, so that by means of the increase made in the value of Gold each new *louis* may continue to be worth twenty-four livres and have precisely the same value in Silver; which *louis* shall bear the imprint designated in the sheet attached to the counter-seal of these presents and shall have currency in all our realm as a twenty-four livre piece.

ARTICLE V. The work of the Coinage of the said louis shall be done with the same remedy of weight and of alloy as our present Gold Money, and shall be judged in our *Cour des Monnoies* conformably with our previous edicts and declarations.

We desire that the melting down and coining of the *louis* be effected in our mints of Paris, Lyons, Metz, Bordeaux, and Nantes only; that the ingots or foreign Gold Specie which may be brought in during this new Coinage be likewise delivered exclusively to the said mints, and that our other mints may not fabricate any *louis* of the new pattern until it be otherwise ordained.

WE COMMAND our beloved and loyal councilors, the persons holding our *Cour des Monnoies* at Paris, that these presents they cause to be read, published, and recorded, and the contents of the same maintained, observed, and executed according to their form and tenor, FOR SUCH IS OUR PLEASURE. In witness whereof we have caused our seal to be put to these presents.

Given at Fontainebleau the thirtieth day of October, the year of grace one thousand seven hundred and eighty-five, and of our reign the twelfth.

(Signed) LOUIS.

And below

By the King, signed the B^{on} DE BRETEUIL. Seen at the council, DE CALONNE; and sealed with the great seal of yellow wax.

MONETARY LAW OF 1803.

Law relating to the fabrication and verification of coins of the 7-17 Germinal [7th to 17th Seedmonth, 28 March to 7th April], year XI of the French Republic [1803].

IN THE NAME OF THE FRENCH PEOPLE,

BONAPARTE, First Consul, PROCLAIMS as law of the Republic the following decree, rendered by the Corps Legislatif the 7 germinal, year xi, comformably with the proposition made by the government the 19 *ventôse* (19th windmonth, March 10), communicated to the tribunal the next day.

DECREE.

General dispositions.

Five grammes of Silver, nine-tenths fine, constitute the monetary unit, which retains the name of franc.

TITLE I.

Of the fabrication of coins.

ART. I. The Silver Coins shall be the quarter of a franc, half-franc, three-quarters of a franc, one-franc, two-franc, and five-franc pieces.

ART. II. Their fineness is fixed at nine-tenths fine and one-tenth alloy.

ART. III. The weight of the quarter of a franc piece shall be one gramme twenty-five centigrammes.

That of the half-franc piece, two grammes five décigrammes.

That of the three-quarters of a franc piece, three grammes seventy-five centigrammes.

That of the one-franc piece, five grammes.

That of the two-franc piece, ten grammes.

That of the five-franc piece, twenty-five grammes.

ART. IV. The tolerance of fineness for silver money shall be three thousandths, outside as well as within.

ART. V. The tolerance of weight shall be for the quarter of a franc piece ten thousandths outside as well as within; for the half-franc and three-quarters of a franc piece, seven thousandths outside as well as within; for the one-franc and two-franc piece, five thousandths outside as well as within, and for the five-franc piece, three thousandths outside as well as within.

ART. VI. There shall be coined Gold pieces of twenty francs and of forty francs.

ART. VII. Their fineness is fixed at nine-tenths fine and one-tenth alloy.

ART. VIII. The twenty-franc pieces shall be struck at the rate of a hundred and fifty-five pieces to the kilogramme, and the forty-franc pieces at that of seventy-seven and a half.

ART. IX. The tolerance of fineness of the Gold Coins is fixed at two thousandths outside, the same within.

ART. X. The tolerance of weight is fixed at two thousandths outside, the same within.

ART. XI. The expense of Coinage alone can be required of those who shall bring material of Gold or Silver to the mint.

These charges are fixed at nine francs per kilogramme of Gold, and at three francs per kilogramme of Silver.

ART. XII. When the material shall be below the monetary standard it shall bear the charges of refining or of separation.

The amount of these charges shall be calculated on the portion of the said material which must be purified in order to raise the whole to the monetary standard.

ART. XIII. There shall be coined pieces of pure copper of two hundredths, three hundredths, and five hundredths of a franc.

ART. XIV. The weight of the pieces of two hundredths shall be four grammes.

That of the pieces of three hundredths, six grammes; that of the pieces of five hundredths, ten grammes.

ART. XV. The tolerance of weight shall be for the copper pieces a fiftieth outside.

ART. XVI. The imprint of the Coins is regulated as follows: On one of the surfaces of the Coins of Gold, of Silver, and of Copper, the head of the First Consul, with the legend, BONAPARTE, PREMIER CONSUL; on the reverse, two olive branches, in the middle of which shall be placed the value of the piece, and outside the legend RÉPUBLIQUE FRANÇAISE, with the date of fabrication.

On the pieces of Gold and copper the head shall look toward the left of the spectator; on the Silver pieces it shall look to the right.

The rim of the five-franc pieces shall bear the legend DIEU PROTÉGE LA FRANCE.

ART. XVII. The diameter of each piece shall be determined by regulations of the public administration.

TITLE II.

Of the verification of the Coins.

ART. XVIII. The Coins struck according to the terms of the present law shall be put in circulation only after verification of their fineness and their weight. This verification shall be made under the eyes of the Management of the Mint, immediately after the arrival of the samples.

ART. XIX. The directors of Coinage may assist at the verification in person or be represented by agent under power of attorney.

ART. XX. The Management shall draw up a minute of the operations relative to the verification of the Coinage; it shall send this minute to the Minister of Finances and of the public Treasury, with its decision.

ART. XXI. The pieces which shall have served to attest the condition of the Coinage shall remain deposited in the archives of the Management of the Mints for five years; they shall then be handed over to the cashier upon receipt, and he shall send them to be melted down.

ART. XXII. In case of fraud in the choice of the samples the authors, abettors, and accomplices of this crime shall be punished as counterfeiters.

Compared with the original by us, president and secretaries of the Corps Legislatif.

At Paris, the 7 Germinal, year XI of the French Republic.

(Signed) GIROD (DE L'AIN),
President.
LATOUR-MAUBOURG,
LEFRANC,
Hippolyte MONSEIGNAT,
BASOCHE,
Secretaries.

Let the present law be invested with the seal of the State, inserted in the *Bulletin des Lois;* inscribed in the registers of the judicial and administrative authorities, and let the *Grand-Juge,* Minister of Justice, be charged with superintending the publication of it.

At Paris, the 17 *Germinal,* year XI of the Republic.

(Signed) BONAPARTE,
First Consul.

The Secretary of State,
HUGUES B. MARET.

And sealed with the seal of the State.

SEEN,

The Grand-Juge, Minister of Justice,
Signed: REGNIER.

SYNOPTICAL TABLE OF FRENCH COINS.

[Unit of account—Franc of 100 centimes.]

Metal.	Denomination of the coins.	Diameter of the coins.	Number of coins in the kilogramme.	Fineness.		Weight.		Par value—		Tolerance allowed for wear below the lower tolerance coinage.
				Legal.	Tolerance above and below.	Legal.	Tolerance above and below.	Of the kilogramme.	Of the coins.	
		Mil.		*Thousandths.*		*Grams.*		*Fr. c.*	*Fr. c.*	
Gold	100 francs	35	31	900.00	0.002	32.2580	0.001	3,100.00	100.00	0.005
	50 francs	28	62			16.1290	0.001		50.00	
	20 francs	21	155			6.4516	0.002		20.00	
	10 francs	19	320			3.2258	0.002		10.00	
	5 francs	17	620			1.6129	0.003		5.00	
Silver	5 francs	37	40	900.00	0.002	25.0000	0.003	200.00	5.00	0.010
	2 francs	27	100	835.00	0.003	10.0000	0.005	185.56	1.86	0.050
	1 franc	23	200			5.0000	0.005		0.93	
	50 centimes	18	400			2.5000	0.007		0.46	
	20 centimes	16	1,000			1.0000	0.010		0.19	
Bronze	10 centimes	30	100	Copper, 95	0.010	10.0000	0.010	.....	.....	.....
	5 centimes	25	200	Tin, 4	0.005	5.0000	0.010	.....	.....	.....
	2 centimes	20	500	Zinc, 1		2.0000	0.015	.....	.....	.....
	1 centime	15	1,000			1.0000	0.015	.....	.....	.....

The legal-tender power of the gold coins and of the silver five-franc piece is unlimited.

The legal-tender power of fractional silver coins struck at .835 is limited to 50 francs between individuals. (Art. 6 of the monetary treaty of 1865.)

The legal-tender power of bronze coins is limited to five francs. (Decrée of 18 August, 1810.)

SEVENTH SESSION.

SEVENTH SESSION.

THURSDAY, *August* 29, 1878.

Present:

The Delegates of—

Austria-Hungary,
Belgium,
France,
Great Britain,
Greece,
Italy,
Russia,
Sweden-Norway,
Switzerland, and of
The United States;

who were present at the preceding session, with the exception of Sir Thomas Seccombe, who had been compelled by official duty to return to England.

The session was opened at 2 p. m.

THE PRESIDENT, Mr. Say, presented to the Conference the result of an enumeration which he had caused to be made on the night of the 14th of August of the Gold 20 and 10 franc pieces and of the Silver 5-franc pieces which were found at that time in the 19,511 offices of account of the finance department of France, including a statement of the country in which they had been coined, and also, for the French Coins, of the date of their Coinage.

This investigation, added Mr. Say, has reference only to pieces of

Money found in offices opened to current circulation. It does not extend to Coins in offices intended to receive deposits which are not in circulation.

But there is reason to think that this examination, made at the same time over the entire extent of the territory of France, will give a very correct idea of the proportions of the various kinds of Coin which are circulating to-day in the country.

The Conference desiring that these tables be printed, they are annexed to the journal, (Exhibit A.)

MR. PIRMEZ, after remarking upon the interest attached to this communication, and having expressed thanks to the President for it, expressed the intention of adding to these documents relating to France a similar statement which he proposes to have made in Belgium. (Exhibit B.)

COUNT RUSCONI, authorized by Mr. Vrolik, the Delegate of the Government of the Netherlands, who had been prevented from coming to Paris by illness in his family, laid upon the table of the Conference a copy of an address relative to the monetary question presented to His Majesty the King of the Netherlands, by the Netherlands Society for the Progress of Industry, a society of which Mr. Vrolik was president. (Exhibit C.)

MR. LARDY presented a note on the monetary system of Switzerland and a statement of the Coinage in Switzerland since 1850. (Exhibit D.)

MR. BROCH presented a statement of the Coinage in the Scandinavian Monetary Union in virtue of the treaties of October 18, 1872, and of May 27, 1873, and a statement of the credit circulation in the three Scandinavian Kingdoms. (Exhibit E.)

THE PRESIDENT, Mr. Say, read the memorandum which was laid upon the table at the last session, and through which the Delegates of the European States proposed to reply to the question proposed by the American Delegation, which was as follows:

Les délégués des États européens représentés à la Conférence désirent exprimer tous leurs remercîments au Gouvernement des États-Unis d'Amérique pour avoir provoqué un échange international d'opinions sur l'importante question monétaire.

Après avoir mûrement considéré les propositions des délégués des États-Unis, ils reconnaissent :.

1° *Qu'il est nécessaire de maintenir dans le monde le rôle monétaire de l'argent aussi bien que celui de l'or ; mais que le choix entre l'emploi de l'un ou de l'autre de ces deux métaux ou l'emploi simultané des deux, doit avoir lieu suivant la situation spéciale de chaque État ou groupe d'États.*

2° *Que la question de la limitation du monnayage de l'argent doit également être laissée à la libre décision de chaque État ou groupe d'États, suivant les conditions particulières où ils peuvent se trouver, et cela d'autant plus que les perturbations qui se sont produites dans ces dernières années sur le marché de l'argent ont diversement affecté la situation monétaire des différents pays;*

3° *Que, en présence des divergences d'opinion qui se sont manifestées et de l'impossibilité où se trouvent même des États ayant le double étalon de prendre un engagement relatif à la frappe illimitée de l'argent, il n'y a pas lieu de discuter la question d'un rapport international de valeur à établir entre les deux métaux.**

THE PRESIDENT, Mr. Say, then invited those of the Delegates who might have special remarks to make on the subject of this reply to take the floor.

MR. GARNIER, after having rendered a tribute to the merit and the brilliant qualities which the Delegates of the United States had shown during the debates, and having expressed praise for the frankness with which they had expressed the views of their Government, said that the Delegates of the other States could not do better than to express themselves, in their turn, with equal clearness.

This was the more necessary in his view, as the discussions of the Conference would not fail to be the subject of comment; and that they might not give rise to any misunderstanding, it was necessary that the opinion of each should be clearly stated.

In order to maintain Silver in its monetary functions, said Mr. Garnier, the Delegates of the United States have proposed to establish between Gold and Silver a fixed relation of value, and my honorable colleague, Mr. Pirmez, has demonstrated that this means is inadmissible.

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*NOTE.—The official translation is as follows:

The Delegates of the European States represented in the Conference desire to express their sincere thanks to the Government of the United States for having procured an international exchange of opinion upon a subject of so much importance as the monetary question.

Having maturely considered the proposals of the representatives of the United States, they recognize:

1. That it is necessary to maintain in the world the monetary functions of Silver as well as those of Gold, but that the selection for use of one or the other of the two metals, or of both simultaneously, should be governed by the special position of each State or group of States.

2. That the question of the restriction of the Coinage of Silver should equally be left to the discretion of each State or group of States, according to the particular circumstances in which they may find themselves placed; and the more so, in that the disturbance produced during the recent years in the Silver market has variously affected the monetary situation of the several countries.

3. That the differences of opinion which have appeared, and the fact that even some of the States which have the Double Standard find it impossible to enter into a mutual engagement with regard to the free Coinage of Silver, exclude the discussion of the adoption of a common ratio between the two metals.

This opinion, in which I fully share, not being contradicted in anything in the draft of an answer which has been read, neither he nor myself make any objection to its adoption.

COUNT VON KUEFSTEIN stated that at the opening of the Conference he had clearly defined the point of view upon which the Imperial and Royal Government had placed itself in accepting the invitation of the United States; he insisted, therefore, that no misunderstanding could occur concerning the sense in which he was able to give his adhesion to the proposed declaration. Whatever proposition we might otherwise formulate, said the Austro-Hungarian Delegate, it will in no wise commit our Governments, nor can it bind the future in any way.

As we have not been able to arrive at practical conclusions upon the American propositions, we have thought it would be for the interest of all concerned to close these debates by the adoption of a formula to which all the Delegates could give their adhesion, and which should be a reply as satisfactory as possible to the Delegates of the United States.

In consequence of the divergences of opinion which have revealed themselves in the course of the discussion, this formula can be nothing but a compromise, embodying the last concessions which the partisans of the Single Gold Standard have been able to make, and at the same time permitting those who would have desired to see the American propositions succeed not to recede from this point of view.

This declaration is entirely theoretical; it leaves to all the States a freedom which they never intended to limit in participating in the Conference, and by virtue of which they can each separately take such measures as they please in monetary matters, or, if they desire, they can ally themselves to-morrow even with other countries, or again can set on foot a new international investigation.

The matter thus remaining an open question, Count von Kuefstein declared that he had no objection to make to the adoption of the proposed response.

COUNT RUSCONI did not believe that for his part he could accept the terms of the response. What, said he, was the object of the Conference, and how has it been fulfilled?

The object of the Conference was to study the means of establishing a fixed relation between the value of the two metals.

Does the proposed declaration respond to this object? Evidently not. It was at least a duty to prepare for the future a basis of agreement of the nations on this subject. It appears, however, said Count Rusconi, that in drawing up this response special care has been taken to avoid anything that might give rise to a hope, even the most vague, of a future understanding. Not a word is said which reveals the idea of a possible international agreement, and the response is limited to a statement that each one will continue to do at home everything that he pleases.

It is true, a recognition is made that Silver has a monetary function

to perform in the world. But what value can this declaration have? Did it depend upon a Conference to ascertain such a fact as this? And if the Conference had not recognized this fact, would Silver have ceased, for all that, to be a Money indispensable for the human race and accepted exclusively by half the world? Would it not have still remained the most necessary and the most ancient of the two kinds of Money, for on the monetary field it is not Silver, it is Gold, which is the new-comer.

In what respect does the simple statement of a fact as obvious as this respond to the object of the Conference? This was what Count Rusconi asked, and it seemed to him that to reach such a result it was hardly necessary that the States of Europe should, almost all of them, have made such haste to accept the invitation of the United States.

Count Rusconi embodied his personal opinion, in which his colleague, Mr. Baralis, shared, in saying—

1st. That by the adoption of the formula proposed the Conference does not respond to the question which was put to it, and that in systematically avoiding to pronounce itself upon the possibility or impossibility of a fixed relation, to be established by way of international treaty, between coins of Gold and of Silver, it leaves its task unfinished.

2d. That since the French law established such a relation between the two metals, the oscillations of their relative value had been without importance, whatever had been the production of the mines.

3d. That consequently, *a fortiori*, if the law of France had been alone able to accomplish the result, the day when France, England, and the United States, by international legislation, should agree to establish together the relation of value of the two metals, this relation would be established upon a basis so solid as to become unshakable.

MR. GOSCHEN said that the instructions given by the government of Her Britannic Majesty to its representatives would not permit them to adhere to a formula which would be in opposition to the Monetary System of the United Kingdom. But as the propositions which the President has just read do not in any way attack the Single Gold Standard, the English Delegates are free to support it.

In order more clearly to present the views of the English Delegation, and to avoid all misunderstanding, Mr. Goschen declared, in the most formal manner, that although the Conference, in its response to the American questions, expressed the idea that Silver ought to play a part in the Monetary Systems of the world, this formula implied no preference in favor of the Double Standard System. If it were otherwise his colleagues and himself could not accept it, for it would be impossible for them to support any declaration in favor of the Double Standard. Expressions may have escaped me during the course of the debates, said Mr. Goschen, which, from their lack of clearness, may have produced a different impression. But when I affirmed that Silver ought to be the ally and partner of Gold, I by no means intended to say by that that the

two metals ought both conjointly to be placed upon the same footing and become legal tender in all countries.

I merely desired to combat the theory of the economists who demand the universal adoption of the Single Gold Standard—a measure which in my view might be the cause of the greatest disasters. I maintain my assertions in this connection absolutely. I believe that it would be a great misfortune if a *propaganda* against Silver should succeed, and I protest against the theory according to which this metal must be excluded from the Monetary Systems of the world. But from my words no opinion ought to be deduced in favor of the adoption of the Double Standard—a system to which my colleagues and myself are entirely opposed, and which has against it the public opinion of the nation which I have the honor to represent.

As for the desire which has been expressed that the hope be left open that some day a fixed relation may be established between Gold and Silver and an international value given to them, the English Delegate declared that in his view it was impossible to realize this, impossible to maintain it in theory, and that it was contrary to the principles of science.

MR. FEER-HERZOG shared the views which had been expressed by the Delegates of Belgium and of Great Britain. They are in his view the exact interpretation of the draft in question.

MR. DE THOERNER demanded the floor for the purpose of saying that he would have adhered without explanation to this draft which had been laid upon the table of the Conference if no comment had been made upon its sense and bearing.

But in view of the observations which had been presented, he thought it his duty to declare, in his turn, that he accepted the proposed draft in the narrow and precise sense of the words it contained; that is to say, not admitting that anything could be inferred from it in one direction or another beyond what was actually there; anything, in fact, which the expressions there used did not themselves mean.

He thought that it was his duty especially to guard against the possibility of any interpretation which should be made of that answer, in the sense of veiled adhesion to the system of the Double Standard.

Russia was under the *régime* of the Single Standard. Public opinion there was absolutely opposed to the Double Standard, and Mr. de Thoerner thought he could say without fear of being mistaken that the Double Standard would never be introduced in Russia, which, however, he added, would nevertheless not exclude the possibility of a monetary circulation of the two metals.

COUNT VON KUEFSTEIN said that in presence of the explanations which had been given, from which it might be inferred that the declaration read by the President might imply an admission of the impossi-

bility of an international arrangement for the Double Standard, he felt himself obliged to declare for his part that, if he adhered to the formula proposed, it was precisely because in his view it did not exclude the idea that such an arrangement was possible.

MR. FENTON, in the name of the American Delegation, requested General Walker to read in English the following:

In response to the address of the Representatives of the European States, the Representatives of the United States desire, on their part, to express their sincere thanks to the European States for accepting their invitation and consulting with them upon a subject of so much importance.

The Representatives of the United States regret that they cannot entirely concur in all that has been submitted to them by a majority of the Representatives of the European States.

They fully concur in a part of the first proposition, viz, that "it is necessary to maintain in the world the monetary functions of Silver as well as those of Gold," and they desire that ere long there may be adequate co-operation to obtain that result. They cannot object to the statement that "the selection for use of one or the other of these two metals, or of both simultaneously, should be governed by the special position of each State"; but if it be necessary to maintain the monetary functions of both metals, as previously declared, they respectfully submit that special positions of States may become of but secondary importance.

From so much of the second proposition as assigns as a special reason for at present restricting the Coinage of Silver, "that the disturbance produced during the recent years in the Silver market has differently affected the monetary situation of the several countries," they respectfully dissent, believing that a policy of action would remove the disturbance that produced these inequalities.

In regard to the third and last proposition, they admit that "some of the States which have the Double Standard," or, as they prefer to say, use both metals, "find it impossible to enter into a mutual engagement for the free Coinage of Silver." They, as Representatives of the United States, have come here expressly to enter into such an engagement. The difficulty is not with them; and wherever it may be, they trust it may be soon removed.

They entirely concur in the conclusion drawn from this state of the case, that "it excludes the discussion of the question of the adoption of a common ratio between the two metals." It is useless to agree upon a particular ratio between the two metals if the nations are not ready also to adopt a policy to uphold it. We remain upon ours; the European States upon theirs.

(Signed) R. E. FENTON.
W. S. GROESBECK.
FRANCIS A. WALKER.
S. DANA HORTON.

The reply of the American Delegates was then repeated in French, as follows:

En réponse à la note des Délégués des États européens, les Délégués des États-Unis désirent, de leur côté, exprimer leurs sincères remercîments aux États de l'Europe qui ont accepté l'invitation de leur gouvernement et aux représentants qui ont conféré avec eux sur un sujet aussi important.

Les représentants des États-Unis regrettent de ne pas pouvoir entièrement adhérer à tout ce qui leur a été soumis par la majorité des représentants des États d'Europe.

Ils adhérent pleinement à une partie de leur première proposition, à savoir: "qu'il est nécessaire de maintenir dans le monde le rôle monétaire de l'argent, aussi bien que celui de l'or," et ils désirent qu'une coopération propre à assurer ce résultat ne se fasse pas longtemps attendre.

Ils ne peuvent rien objecter à ce que "le choix entre l'emploi de l'un ou de l'autre de ces deux métaux, ou l'emploi simultané des deux, doit avoir lieu suivant la situation spéciale de chaque État"; mais, s'il est nécessaire de maintenir le rôle monétaire des deux métaux, ainsi qu'il a été précédemment déclaré, ils font respectueusement observer que ces situations spéciales des États peuvent devenir d'une importance secondaire.

En ce qui touche cette partie de la seconde proposition qui donne pour raison spéciale de la limitation actuelle de la frappe de l'argent, "que les perturbations qui se sont produites dans ces dernières années sur le marché de l'argent ont diversement affecté la situation monétaire des divers États," ils déclarent respectueusement ne pouvoir partager cette opinion, croyant qu'une politique d'action ferait disparaître les perturbations qui ont produit ces inégalités.

En ce qui concerne la troisième et dernière proposition, ils admettent que quelques-uns des États ayant le double étalon ou, ainsi qu'ils préfèrent le dire, faisant usage des deux métaux, trouvent impossible de prendre un engagement réciproque relatif à la frappe illimitée de l'argent. Eux, comme représentants des États-Unis, sont venus ici expressément pour arriver à contracter un tel engagement. La difficulté ne vient pas de leur côté, et, de quelque part qu'elle vienne, ils ont confiance qu'elle pourra bientôt être écartée.

"Ils adhèrent entièrement à la conclusion tirée de cet état de choses, qu'il exclut toute discussion de la question de l'adoption d'un rapport commun entre les deux métaux." Il est inutile de se mettre d'accord sur un rapport particulier entre les deux métaux, si les États ne sont pas prêts également à adopter des mesures pour maintenir ce rapport. Nous gardons le nôtre; les États de l'Europe gardent le leur.

(*Signé*) *R. E. FENTON.*
W. S. GROESBECK.
FRANCIS A. WALKER.
S. DANA HORTON.

No member of the Conference demanding the floor, the President (Mr. Say) stated that under the various reservations which have been ex-

pressed, the reply to the questions proposed by the American Delegates is accepted by all the Delegates of the European States, excepting Count Rusconi and Commander Baralis, and that in consequence it would appear in the Journal.

MR. GOSCHEN desired, before the session should be closed, to become the interpreter of the general feeling in thanking Mr. Léon Say for the prudent and courteous manner in which he had presided over the debates of the Conference. If in relation to subjects so difficult, and upon which there was so much disagreement, at least a statement of ideas had been arrived at upon which there could be an agreement satisfactory to the great majority of the members of this assembly, it was certainly, he said, due to the able direction of its President that the Conference was indebted for this result.

Mr. Goschen further expressed thanks to Mr. Charles Jagerschmidt, who had occupied himself so beneficially in the arrangement of this final understanding. He added that he believed he was reflecting the feeling of his colleagues in calling attention to the services rendered by the Secretaries, whose task had been rendered peculiarly difficult by the employment of two languages in the debates.

MR. FENTON said that the honorable Mr. Goschen having anticipated him, it only remained for him to express his entire accord with the feeling that gentleman had expressed. He desired, however, in addition, in the name of the Delegates of the United States, to thank Mr. Léon Say for the ability and impartiality with which he had presided over the Conference, and to say that he was sensible of the cordial and hospitable reception which he and his colleagues had received from the Delegates of France, as well as to the courtesy shown them on the part of the other Delegates.

The Conference expressing unanimous accord with the sentiments expressed by Mr. Goschen and by Mr. Fenton, the PRESIDENT (Mr. Say) thanked his colleagues for the confidence which they had not ceased to show him in the course of their labors, and congratulated himself on having been enabled to conduct these labors to their present conclusion.

No active measure, no common resolution, he said, has come forth from our discussions, and none could come; but much light upon an obscure matter has proceeded from them, and a monument of them will remain—the book of our proceedings, to which will be consigned so many facts the knowledge of which will be of use, so many views and observations which may enlighten governments.

The Conference unanimously voted its thanks to the Secretaries, Mr. Ernest Crampon and Mr. Henri Jagerschmidt, and adjourned at 3.30 p. m.

EXHIBITS TO THE SEVENTH SESSION.

EXHIBIT A.

[Ministry of Finance. Direction of the general movement of the funds.]

INVESTIGATION INTO THE MONETARY CIRCULATION.

TABLE I.

Table giving, by departments, the number of 20-franc and 10-franc Gold pieces, and of Silver 5-franc pieces, found in the 19,511 offices of account of the financial administration of France the 14th of August, 1878 (evening).

Departments.	20 francs, gold.			10 francs, gold.			5 francs, silver.		
	National pieces.	Foreign pieces.	Total.	National pieces.	Foreign pieces.	Total.	National pieces.	Foreign pieces.	Total.
Ain	7,686	1,274	8,960	5,118	129	5,247	8,704	8,304	17,008
Aisne	12,133	3,213	15,346	5,629	94	5,723	18,778	15,001	33,779
Allier	5,129	801	5,930	3,181	50	3,231	7,783	4,424	12,207
Alpes (Basses-)	2,251	298	2,549	1,856	37	1,893	3,868	2,113	5,981
Alpes (Hautes-)	2,281	350	2,631	1,583	33	1,616	1,655	932	2,587
Alpes-Maritimes	3,138	573	3,711	2,307	76	2,383	5,112	6,417	11,529
Ardèche	5,028	864	5,892	2,393	44	2,437	5,532	4,288	9,820
Ardennes	6,715	1,718	8,433	3,335	50	3,385	12,487	10,376	22,863
Ariége	2,473	195	2,668	1,771	30	1,801	2,757	400	3,157
Aube	6,466	1,054	7,520	2,972	62	3,034	8,294	4,355	12,649
Aude	4,637	512	5,149	3,138	51	3,189	5,168	1,042	6,210
Aveyron	4,863	632	5,495	2,996	48	3,044	5,064	1,546	6,610
Bouches-du-Rhône	8,871	1,646	10,517	7,117	419	7,536	11,603	6,802	18,405
Calvados	9,745	1,670	11,415	4,936	80	5,016	16,822	6,249	23,071
Cantal	2,550	343	2,893	2,113	27	2,140	3,027	1,103	4,130
Charente	3,634	329	3,963	2,615	24	2,639	13,733	1,881	15,614
Charente-Inférieure	4,327	299	4,626	2,574	40	2,614	20,154	5,689	25,843
Cher	3,869	328	4,197	2,841	40	2,881	6,700	2,784	9,484
Corrèze	2,955	289	3,244	2,020	38	2,058	3,985	823	4,808
Corse	9,003	1,925	10,928	1,395	99	1,494	6,919	6,259	13,178
Côte-d'Or	7,891	1,254	9,145	4,891	361	5,252	7,122	5,841	12,963
Côtes-du-Nord	6,805	682	7,487	3,398	65	3,463	20,896	4,807	25,703
Creuse	2,834	321	3,155	1,357	13	1,370	2,483	895	3,378
Dordogne	5,633	497	6,130	3,844	49	3,893	10,173	1,204	11,377
Doubs	6,386	1,299	7,685	4,480	84	4,564	7,252	8,800	16,052
Drôme	4,796	822	5,618	3,567	92	3,659	6,240	5,390	11,630

TABLE I—Continued.

Departments.	20 francs, gold.			10 francs, gold.			5 francs, silver.		
	National pieces.	Foreign pieces.	Total.	National pieces.	Foreign pieces.	Total.	National pieces.	Foreign pieces.	Total.
Eure	8,271	1,192	9,463	4,924	84	5,008	18,020	7,062	25,082
Eure-et-Loir	5,959	1,162	7,121	2,706	38	2,804	3,636	1,523	5,159
Finistère	7,419	599	8,018	4,792	31	4,823	28,799	6,480	35,279
Gard	6,851	1,146	7,997	3,150	96	3,246	5,191	3,195	8,386
Garronne (Haute-)	6,845	698	7,543	4,623	54	4,677	14,052	1,663	15,715
Gers	3,062	219	3,281	2,461	29	2,490	5,659	578	6,237
Gironde	6,238	563	6,801	4,734	49	4,783	16,686	2,085	18,771
Hérault	6,001	876	6,877	3,749	115	3,864	6,851	2,508	9,359
Ille-et-Vilaine	4,044	551	4,595	3,779	21	3,800	17,131	6,810	23,941
Indre	3,461	497	3,958	2,638	34	2,672	8,039	2,330	10,369
Indre-et-Loire	4,694	699	5,393	2,598	49	2,647	14,943	3,899	18,842
Isère	6,625	1,111	7,736	5,302	131	5,433	7,292	7,391	14,683
Jura	5,936	1,002	6,938	4,950	103	5,053	4,629	5,062	9,691
Landes	2,109	144	2,253	1,574	23	1,597	11,735	1,410	13,145
Loir-et-Cher	4,169	746	4,915	2,073	18	2,091	4,048	1,351	5,399
Loire	5,578	943	6,521	3,479	161	3,640	10,575	7,678	18,253
Loire (Haute-)	3,022	414	3,436	2,072	45	2,117	5,308	3,385	8,693
Loire-Inférieure	6,207	604	6,811	4,245	21	4,266	15,894	4,094	19,988
Loiret	4,467	906	5,373	2,898	108	3,006	5,144	2,300	7,444
Lot	3,464	534	3,998	2,357	127	2,484	7,610	979	8,589
Lot-et-Garonne	3,180	199	3,379	2,568	14	2,582	9,202	912	10,114
Lozère	2,114	314	2,428	1,319	102	1,421	3,573	724	4,297
Maine-et-Loire	7,605	818	8,423	4,862	74	4,936	14,602	3,865	18,527
Manche	6,855	785	7,640	3,977	36	4,013	15,495	5,309	20,804
Marne	9,454	1,525	10,979	3,459	83	3,542	10,293	5,885	16,178
Marne (Haute-)	5,349	787	6,136	3,099	63	3,162	6,030	3,364	9,394
Mayenne	3,445	373	3,818	2,496	16	2,512	5,149	1,420	6,569
Meurthe-et-Moselle	13,424	2,967	16,391	6,620	140	6,760	13,382	8,906	22,288
Meuse	9,360	1,831	11,191	5,010	101	5,111	10,058	7,249	17,307
Morbihan	3,503	223	3,726	2,728	55	2,783	14,580	2,812	17,392
Nièvre	5,033	862	5,895	3,518	41	3,559	4,190	1,971	6,161
Nord	15,983	9,394	25,377	6,989	81	7,070	22,233	22,236	44,469
Oise	10,686	2,378	13,064	3,918	48	3,966	5,897	3,967	9,864
Orne	4,913	787	5,700	2,844	41	2,885	9,325	3,240	12,565
Pas-de-Calais	11,980	4,626	16,606	4,987	77	5,064	14,675	11,221	25,896
Puy-de-Dôme	5,959	874	6,833	4,268	70	4,338	7,656	4,583	12,239
Pyrénées (Basses-)	6,707	532	7,239	4,746	93	4,839	15,718	1,594	17,312
Pyrénées (Hautes-)	2,770	292	3,062	1,876	19	1,895	3,015	387	3,402
Pyrénées-Orientales	2,532	366	2,898	1,788	74	1,862	2,965	507	3,472
Rhône	8,462	1,623	10,085	6,240	138	6,378	10,226	10,628	20,854
Saône (Haute-)	6,593	1,272	7,865	5,037	89	5,126	6,535	5,941	12,476
Saône-et-Loire	9,448	1,278	10,726	7,804	148	7,952	9,231	7,940	17,171
Sarthe	6,813	948	7,761	4,460	101	4,561	13,070	3,704	16,774
Savoie	4,129	775	4,904	2,452	122	2,574	5,951	2,807	7,758
Savoie (Haute-)	2,413	522	2,935	1,890	38	1,928	4,140	5,803	9,943
Seine Inférieure	20,586	3,339	23,925	8,804	156	8,960	27,026	13,713	40,739
Seine-et-Marne	12,111	2,690	14,801	4,266	72	4,338	7,361	3,756	11,117
Seine-et-Oise	20,898	4,135	25,033	8,436	125	8,561	10,504	5,883	16,387
Sèvres (Deux-)	2,068	201	2,269	1,613	23	1,636	7,981	1,165	9,146
Somme	11,348	2,825	14,173	6,212	83	6,295	12,665	8,326	20,991
Tarn	3,204	307	3,511	2,612	39	2,651	11,246	1,797	13,043
Tarn-et-Garonne	2,143	228	2,371	1,754	29	1,783	5,822	726	6,548
Var	5,944	939	6,883	3,271	144	3,415	8,000	6,187	14,187
Vaucluse	3,913	782	4,695	2,958	79	3,037	5,624	3,447	9,071
Vendée	3,245	314	3,559	3,364	39	3,403	7,874	1,377	9,251
Vienne	2,304	272	2,576	1,945	20	1,965	6,965	1,497	8,462
Vienne (Haute-)	3,795	407	4,202	2,174	23	2,197	4,785	640	5,425
Vosges	8,931	1,716	10,647	5,035	92	5,127	7,636	5,166	12,802
Yonne	4,849	924	5,773	3,347	55	3,402	5,482	2,711	8,193
Seine	52,346	12,175	64,521	17,376	216	17,592	27,214	14,543	41,757
Totals	572,916	105,399	678,315	324,713	6,531	331,244	824,989	388,417	1,213,406

TABLE II.

Table showing, by the countries in which they originated, the foreign 20-franc and 10-franc Gold pieces found in the 19,511 offices of account of the financial administration in France the 14th of August, 1878 (evening).

Departments.	20-franc pieces.						10-franc pieces.					
	Austro-Hungarian.	Belgian.	Greek.	Italian.	Swiss.	Total.	Austro-Hungarian.	Belgian.	Greek.	Italian.	Swiss.	Total.
Ain	64	431	3	776	....	1,274	23	4	1	101	....	129
Aisne	66	2,632	10	505	....	3,213	18	21	1	54	....	94
Allier	24	432	1	343	1	801	7	4	2	37	....	50
Alpes (Basses-)	15	82	1	200	....	298	2	1	1	33	....	37
Alpes (Hautes-)	11	115	4	219	1	350	3	....	2	28	....	33
Alpes-Maritimes	35	192	5	341	....	573	8	....	1	67	....	76
Ardèche	37	271	16	540	....	864	5	....	3	36	....	44
Ardennes	38	1,448	4	228	....	1,718	10	6	....	34	....	50
Ariége	7	53	12	123	....	195	.....	1	2	27	....	30
Aube	37	756	.....	253	8	1,054	9	14	1	38	....	62
Aude	22	173	26	291	....	512	7	5	1	38	....	51
Aveyron	17	309	3	303	....	632	5	2	....	41	....	48
Bouches-du-Rhône	113	562	59	911	1	1,646	91	2	102	224	....	419
Calvados	52	1,208	5	405	....	1,670	5	7	....	68	....	80
Cantal	4	187	1	150	1	343	1	.....	.....	26	....	27
Charente	5	181	1	140	2	329	2	1	1	20	....	24
Charente-Inférieure	4	182	.....	113	....	299	.....	10	1	29	....	40
Cher	11	200	2	115	....	328	2	9	....	29	....	40
Corrèze	2	136	2	149	....	289	2	2	....	34	....	38
Corse	124	553	307	941	....	1,925	6	....	45	48	....	99
Côte-d'Or	115	658	5	474	2	1,254	37	45	....	279	....	361
Côtes-du-Nord	20	407	1	252	2	682	2	4	....	59	....	65
Creuse	7	194	1	119	....	321	2	1	....	10	....	13
Dordogne	9	272	1	215	....	497	2	3	....	44	....	49
Doubs	132	725	5	437	....	1,299	24	....	1	59	....	84
Drôme	39	249	5	529	....	822	5	5	1	81	....	92
Eure	31	845	5	303	8	1,192	8	2	....	74	....	84
Eure-et-Loir	32	850	13	267	....	1,162	6	4	1	27	....	38
Finistère	25	347	1	226	....	599	1	3	1	26	....	31
Gard	55	355	10	725	1	1,146	8	1	7	80	....	96
Garonne (Haute-)	22	270	7	399	....	698	8	2	2	42	....	54
Gers	4	83	.....	126	6	219	.....	3	1	25	....	29
Gironde	9	287	1	265	1	563	4	....	1	44	....	49
Hérault	48	264	16	547	1	876	3	16	1	95	....	115
Ille-et-Vilaine	9	375	1	162	4	551	5	.....	.....	16	....	21
Indre	19	310	.....	168	....	497	3	11	....	20	....	34
Indre-et-Loire	25	491	3	180	....	699	5	18	1	25	....	49
Isère	65	346	18	681	1	1,111	22	10	5	94	....	131
Jura	75	524	5	380	18	1,002	22	2	7	72	....	103
Landes	4	70	.....	70	....	144	1	9	....	13	....	23
Loir-et-Cher	10	552	.....	183	1	746	.....	2	....	16	....	18
Loire	31	308	7	590	7	943	17	42	2	100	....	161
Loire (Haute-)	16	152	2	244	....	414	7	8	....	30	....	45
Loire-Inférieure	10	351	2	239	2	604	.....	2	1	18	....	21
Loiret	16	671	2	216	1	906	31	8	1	68	....	108
Lot	8	273	18	235	....	534	1	40	16	70	....	127
Lot-et-Garonne	5	81	1	112	....	199	.....	.....	.....	14	....	14
Lozère	14	87	3	210	....	314	2	.....	.....	100	....	102
Maine-et-Loire	17	517	4	271	9	818	6	8	2	58	....	74
Manche	15	514	3	253	....	785	1	7	....	28	....	36
Marne	73	1,174	1	275	2	1,525	6	30	2	45	....	83
Marne (Haute-)	59	517	4	206	1	787	11	19	1	32	....	63
Mayenne	8	246	1	118	....	373	2	1	....	13	....	16
Meurthe-et-Moselle	326	1,887	5	749	....	2,967	48	6	1	85	....	140
Meuse	233	1,242	3	353	....	1,831	30	20	....	51	....	101
Morbihan	2	125	1	95	....	223	4	22	....	29	....	55
Nièvre	31	571	3	257	....	862	1	2	1	37	....	41
Nord	98	8,730	14	548	4	9,394	14	2	1	64	....	81
Oise	60	1,902	7	409	....	2,378	4	7	1	36	....	48
Orne	23	565	2	197	....	787	1	9	2	29	....	41
Pas-de-Calais	49	4,107	3	465	2	4,626	9	20	2	46	....	77
Puy-de-Dôme	24	435	4	410	1	874	4	1	....	65	....	70
Pyrénées (Basses-)	9	263	6	254	....	532	3	4	5	81	....	93
Pyrénées (Hautes-)	7	158	2	117	8	292	.....	.....	1	18	....	19
Pyrénées-Orientales	29	93	4	240	....	366	9	8	16	41	....	74
Rhône	83	540	11	987	2	1,623	29	1	3	105	....	138
Saône (Haute-)	97	793	5	376	1	1,272	17	5	1	56	....	89
Saône-et-Loire	88	562	35	591	2	1,278	19	8	2	119	....	148

TABLE II—Continued.

Departments.	20-franc pieces.						10-franc pieces.					
	Austro-Hungarian.	Belgian.	Greek.	Italian.	Swiss.	Total.	Austro Hungarian.	Belgian.	Greek.	Italian.	Swiss.	Total.
Sarthe	63	646	6	233	....	948	20	43	1	37	....	101
Savoie	53	335	4	382	1	775	18	14	1	89	....	122
Savoie (Haute-)	44	284	3	190	1	522	15	....	....	23	....	38
Seine-Inférieure	106	2,363	10	860	....	3,339	13	28	6	109	....	156
Seine-et-Marne	76	2,049	19	554	1	2,690	9	2	1	50	....	72
Seine-et-Oise	140	3,150	28	816	1	4,135	36	12	1	76	....	125
Sèvres (Deux-)	4	126	3	68	....	201	3	....	1	19	....	23
Somme	63	2,348	1	413	....	2,825	22	3	1	57	....	83
Tarn	3	104	3	197	....	307	2	4	2	31	....	39
Tarn-et-Garonne	1	91	.....	136	....	228	1	....	....	28	....	29
Var	50	284	37	568	....	939	8	4	....	132	....	144
Vaucluse	36	224	4	517	1	782	9	4	2	64	....	79
Vendée	6	188	3	117	....	314	3	6	3	27	....	39
Vienne	4	177	.....	90	1	272	1	3	....	16	....	20
Vienne (Haute-)	10	230	.....	166	1	407	1	2	....	20	....	23
Vosges	150	1,021	8	535	2	1,716	15	10	2	65	....	92
Yonne	42	658	3	219	2	924	5	13	....	37	....	55
Seine	481	9,568	13	2,110	3	12,175	64	8	2	142	....	216
Totals	4,206	69,287	849	30,942	115	105,399	895	686	277	4,673	....	6,531

TABLE III.

Table giving, by countries, the origin of the foreign Silver 5-franc pieces found in the 19,511 *offices of account of the financial administration of France, the* 14*th of August,* 1878 *(evening).*

Departments.	Foreign silver 5-franc pieces.				
	Belgian.	Greek.	Italian.	Swiss.	Total.
Ain	1,149	38	6,791	326	8,304
Aisne	12,033	21	2,855	92	15,001
Allier	1,618	8	2,751	47	4,424
Alpes (Basses-)	288	122	1,690	13	2,113
Alpes (Hautes-)	133	31	756	12	932
Alpes-Maritimes	361	101	5,925	30	6,417
Ardèche	684	61	3,434	109	4,288
Ardennes	8,807	5	1,523	41	10,376
Ariége	95	8	294	3	400
Aube	2,547	8	1,735	65	4,355
Aude	218	55	755	14	1,042
Aveyron	389	22	1,110	25	1,546
Bouches-du-Rhône	656	1,420	4,524	202	6,802
Calvados	4,135	5	2,040	69	6,249
Cantal	358	4	730	11	1,103
Charente	823	2	1,046	10	1,881
Charente-Inférieure	2,123	98	3,398	70	5,689
Cher	1,440	24	1,276	44	2,784
Corrèze	322	4	489	8	823
Corse	339	31	5,883	6	6,259
Côte-d'Or	1,721	11	3,696	413	5,841
Côtes-du-Nord	2,776	1	2,014	16	4,807
Creuse	445	1	430	19	895
Dordogne	472	9	708	15	1,204
Doubs	1,954	18	6,367	461	8,800
Drôme	893	62	4,354	81	5,390
Eure	4,540	81	2,286	155	7,062
Eure-et-Loir	917	24	545	37	1,523
Finistère	3,762	17	2,628	73	6,480
Gard	440	171	2,541	43	3,195

TABLE III—Continued.

Departments.	Foreign silver 5-franc pieces.				
	Belgian.	Greek.	Italian.	Swiss.	Total.
Garonne (Haute-)	440	29	1,175	19	1,663
Gers	179	8	389	2	578
Gironde	623	12	1,431	19	2,085
Hérault	362	82	2,015	49	2,508
Ille-et-Vilaine	4,572	15	2,192	31	6,810
Indre	1,213	5	1,096	16	2,330
Indre-et-Loire	2,059	9	1,798	33	3,899
Isère	1,026	46	6,168	151	7,391
Jura	1,008	19	3,813	222	5,062
Landes	443	.....	961	6	1,410
Loir-et-Cher	777	1	570	3	1,351
Loire	1,860	38	5,667	113	7,678
Loire (Haute-)	837	17	2,485	46	3,385
Loire-Inférieure	2,458	3	1,600	33	4,094
Loiret	1,381	10	885	24	2,300
Lot	268	18	685	8	979
Lot-et-Garonne	314	2	590	6	912
Lozère	89	19	612	4	724
Maine-et-Loire	2,100	3	1,704	58	3,865
Manche	3,657	8	1,598	46	5,309
Marne	4,059	7	1,775	44	5,885
Marne (Haute-)	1,726	5	1,487	146	3,364
Mayenne	941	1	475	3	1,420
Meurthe-et-Moselle	6,172	18	2,650	66	8,906
Meuse	5,240	9	1,964	36	7,249
Morbihan	1,664	8	1,100	40	2,812
Nièvre	865	8	1,073	25	1,971
Nord	20,010	18	2,162	46	22,236
Oise	2,951	12	981	23	3,967
Orne	2,170	9	1,051	10	3,240
Pas-de-Calais	9,662	6	1,541	12	11,221
Puy-de-Dôme	1,279	12	3,230	62	4,583
Pyrénées (Basses-)	431	14	1,142	7	1,594
Pyrénées (Hautes-)	118	9	241	19	387
Pyrénées-Orientales	124	6	371	6	507
Rhône	1,803	74	8,499	252	10,628
Saône (Haute-)	1,857	13	3,781	290	5,941
Saône-et-Loire	1,703	37	5,994	206	7,940
Sarthe	2,244	12	1,411	37	3,704
Savoie	631	27	2,936	213	3,807
Savoie (Haute-)	750	29	4,685	339	5,803
Seine-Inférieure	8,813	27	4,780	93	13,713
Seine-et-Marne	2,303	17	1,394	42	3,756
Seine-et-Oise	3,656	52	2,092	83	5,883
Sèvres (Deux-)	516	13	619	17	1,165
Somme	6,791	15	1,495	25	8,326
Tarn	447	18	1,316	16	1,797
Tarn-et-Garonne	221	8	490	7	726
Var	487	266	5,394	40	6,187
Vaucluse	469	126	2,791	61	3,447
Vendée	661	5	702	9	1,377
Vienne	733	7	735	22	1,497
Vienne (Haute-)	305	1	332	2	640
Vosges	2,554	1	2,466	145	5,166
Yonne	1,373	7	1,267	64	2,711
Seine	8,772	104	5,482	185	14,543
Totals	186,605	3,808	191,912	6,092	388,417

TABLE IV.

Table showing, by their dates, the number of 30-franc pieces coined in France from 1803 to July 31, 1878, and the number of pieces of that denomination found in the 19,511 offices of account of the financial adminstration of France, August 14, 1878.

Date.	Number of pieces.		Percentage of pieces found compared with the amount coined in the year to which they belong.	Date.	Number of pieces.		Percentage of pieces found compared with the amount coined in the year to which they belong.
	Coined each year.	Found in the investigation.			Coined each year.	Found in the investigation.	
1803	58,262	572	9.81	Brought over	47,779,389	34,468	
1804	1,416,387	347	0.24	1842	92,636	149	1.60
1805	520,311	138	0.26	1843	141,330	139	0.96
1806	1,151,950	659	0.57	1844	137,113	303	2.21
1807	839,444	571	0.68	1845	5,957	109	18.29
1808	1,482,975	1,024	0.69	1846	104,321	116	1.11
1809	720,110	566	0.78	1847	385,301	449	1.16
1810	2,186,802	1,435	0.65	1848	1,984,887	3,722	1.87
1811	4,070,593	2,475	0.60	1849	1,355,478	3,175	2.34
1812	3,471,798	2,424	0.66	1850	3,963,594	6,791	1.71
1813	3,037,054	1,925	0.63	1851	12,585,214	19,280	1.55
1814	3,227,236	2,072	0.64	1852	694,065	18,280	26.33
1815	2,768,992	2,104	0.75	1853	15,648,201	11,175	0.71
1816	640,106	235	0.36	1854	23,485,957	38,866	1.65
1817	2,428,882	1,608	0.66	1855	18,399,783	31,465	1.71
1818	4,042,851	2,296	0.56	1856	18,745,899	28,928	1.54
1819	2,611,313	1,430	0.54	1857	19,193,214	35,007	1.82
1820	1,428,094	737	0.51	1858	18,877,635	31,531	1.67
1821	20,207	72	3.56	1859	26,166,075	45,353	1.73
1822	233,937	224	0.95	1860	15,946,635	27,775	1.74
1823	20,087	79	3.93	1861	4,030,253	7,051	1.74
1824	324,477	1,574	4.85	1862	7,732,433	14,957	1.93
1825	2,179,346	411	0.18	1863	7,672,703	16,719	2.17
1826	46,153	76	1.64	1864	10,382,097	18,139	1.74
1827	157,835	223	1.41	1865	6,039,858	16,794	2.77
1828	297,259	347	1.16	1866	13,970,178	22,182	1.58
1829	13,729	52	3.78	1867	7,439,514	18,062	2.42
1830	464,908	484	1.04	1868	14,110,127	26,137	1.85
1831	2,356,943	2,055	0.87	1869	11,362,847	19,631	1.72
1832	49,433	470	9.50	1870	2,717,440	5,240	1.92
1833	394,307	317	0.80	1871	2,508,494	1,551	0.61
1834	883,344	683	0.77	1872			
1835	152,927	153	0.95	1873			
1836	149,376	182	1.21	1874	1,215,985	640	0.52
1837	44,889	103	2.31	1875	11,745,600	5,049	0.42
1838	184,953	255	1.37	1876	8,824,658	21,852	2.47
1839	1,033,454	917	0.88	1877	12,759,057	20,242	1.58
1840	2,049,912	2,409	1.17	1878	7,090,088	20,618	2.90
1841	618,753	764	1.23				
						571,945	
						971*	
Carried over	47,779,389	34,468		Total	355,294,106	572,916	

* Indications incomplete or omitted.

TABLE V.

Table showing by their dates the number of French Gold 10-*franc pieces coined in France* (1850 *to* 1869) *and that of the pieces of the same denomination found in the* 19,511 *offices of account of the financial administration of France, August* 14, 1878.

Date.	Number of pieces.		Percentage of pieces found compared with the amount coined in the year to which they belong.	Date.	Number of pieces.		Percentage of pieces found compared with the amount coined in the year to which they belong.
	Coined each year.	Found in the investigation.			Coined each year.	Found in the investigation.	
1850	592,051	2,361	3.98	Brought over ..	68,645,019	201,712	.....
1851	1,800,524	9,751	5.41				
1852	1,314,697	768	0.58	1861	1,029,214	1,295	1.25
1853	.....	.....	.....	1862	4,712,118	17,343	3.68
1854	3,899,802	1,858	0.47	1863	4,251,637	15,814	3.71
1855	6,149,585	16,495	2.68	1864	4,788,520	20,706	4.32
1856	10,777,734	28,906	2.68	1865	3,249,295	12,803	3.94
1857	14,498,136	43,392	2.99	1866	6,495,917	21,808	3.35
1858	8,211,046	27,940	3.40	1867	3,550,274	13,215	3.72
1859	13,325,889	42,478	0.18	1868	4,532,811	15,672	3.45
1860	8,075,555	27,763	3.43	1869	109,351	1,381	12.63
						*321,749	
						2,964*	
Carried over...	68,645,019	201,712		Total	101,364,156	324,713	

* Indications incomplete or omitted.

TABLE VI.

Table showing, by dates, the number of silver 5-franc pieces coined in France from the year IV to 1878, inclusive, and the number of pieces of the same denomination found in the 19,511 offices of account of the financial administration, the 14 August, 1878.

Date.	Number of pieces—		Percentage of pieces found compared with the amount coined in the year to which they belong.	Date.	Number of pieces—		Percentage of pieces found compared with the amount coined in the year to which they belong.
	Coined each year.	Found in the investigation.			Coined each year.	Found in the investigation.	
Years IV and V	8,279,877	927	0.11	1839	14,307,757	14,643	1.02
Year VI	2,383,460	648	0.27	1840	12,261,177	12,928	1.05
Year VII	3,795,941	772	0.20	1841	14,659,936	15,797	1.07
Year VIII	2,770,446	817	0.29	1842	13,175,982	12,812	0.97
Year IX	763,319	647	0.84	1843	14,371,790	14,057	0.98
Year X	968,557	442	0.45	1844	13,395,112	13,384	0.99
Year XI	2,285,851	668	0.29	1845	16,780,658	15,069	0.89
1803	4,565,400	1,013	0.22	1846	8,442,203	9,347	1.10
1804	8,460,663	1,175	0.13	1847	14,322,006	14.133	0.98
1805	7,836,898	662	0.08	1848	23,810,589	23,204	0.97
1806	4,485,649	684	0.15	1849	40,766,309	33,155	0.81
1807	804,423	1,128	1.40	1850	16,120,678	13,886	0.86
1808	9,382,286	2,179	0.23	1851	11,499,290	11,848	1.03
1809	7,985,445	1,877	0.23	1852	13,900,200	13,902	0.99
1810	10,344,480	2,120	0.20	1853	3,891,632	1,260	0.32
1811	48,947,496	8,556	0.17	1854	10,615	902	84.02
1812	31,045,613	5,909	0.19	1855	4,861,173	3,723	0.76
1813	26,002,853	4,541	0.17	1856	9,155,481	5,435	0.59
1814	12,157,707	2,487	0.20	1857	93,406	1,320	14.13
1815	7,532,048	1,588	0.21	1858	26,790	1,099	41.02
1816	6,836,669	1,489	0.21	1859	3,365	1,461	431.20
1817	7,008,958	1,495	0.21	1860			
1818	2,419,939	560	0.23	1861	22,098	1,648	74.57
1819	4,188,801	837	0.20	1862	21,129	893	42.26
1820	3,612,292	871	0.24	1863	21,687	798	36.79
1821	13,355,182	2,584	0.19	1864	32,168	599	18.62
1822	19,688,279	3,621	0.18	1865	97,134	780	8.03
1823	16,068,150	3,165	0.19	1866	37,893	1,369	36.12
1824	22,314,567	5,867	0.26	1867	10,810,312	33,399	3.09
1825	14,573,894	2,170	0.14	1868	18,724,110	55,537	2.97
1826	17,746,462	6,707	0.37	1869	11,652,857	33,128	2.84
1827	29,916,081	10,741	0.35	1870	10,729,670	34,186	3.19
1828	31,426,133	11,117	0.35	1871	942,181	4,115	4.36
1829	19,929,090	7,480	0.37	1872	77,838	2,387	30.66
1830	23,739,223	15,019	0.63	1873	30,929,809	31,544	1.02
1831	40,658,479	42,142	1.03	1874	11,999,202	27,603	2.30
1832	26,861,063	26,233	0.97	1875	15,000,000	18,692	1.24
1833	30,885,119	33,204	1.07	1876	10,532,263	12,807	1.21
1834	42,306,804	42,856	1.01	1877*	3,292,857	6,287	1.90
1835	19,162,221	18,102	0.94	1878	363,130	566	1.55
1836	8,303,765	9,473	1.14				
1837	21,840,508	22,107	1.01	Total	1,012,120,094†	824,989	
1838	17,248,016	18,606	1.07				

* The coinage of 5-franc pieces in 1877 and 1878 belongs to engagements entered into prior to the law of August 5, 1876. They are a part of the quota allowed by the supplementary treaties of the Union.

† I am indebted for the correction here made of the erroneous addition in the French text to Mr. Charles S. Hill, editor of the American Statistical Review.—H.

EXHIBIT B.

INVESTIGATION INTO THE MONETARY CIRCULATION IN BELGIUM.

The investigation was made by the National Bank upon the basis of its receipts of September 26, 1878, in all its agencies and in the State Treasury (Caisse de l'Etat) at Brussels, and by the Ministry of Finances upon the basis of its receipts of October 3, 1878, in the offices of account in all branches of the public service.

I.—Distribution of Coins according to their origin.

Table A.—*Investigation by the National Bank.*

PROVINCES.	20-franc pieces.							10-franc pieces.							Silver 5-franc pieces.					
	Belgium.	Austro-Hungarian.	French.	Greek.	Italian.	Swiss.	Total.	Belgium.	Austro-Hungarian.	French.	Greek.	Italian.	Swiss.	Total.	Belgium.	French.	Greek.	Italian.	Swiss.	Total.
Anners	416	15	783	.....	35	.....	.....	.....	3	623	.....	2	.....	.....	2,706	2,723	.....	154	.....	.....
Brabant	704	17	860	.....	50	.....	.....	.....	3	468	.....	2	.....	.....	3,001	2,900	.....	169	2	.....
Flandre Occidentale	561	22	1,278	.....	55	.....	.....	.....	1	666	.....	3	.....	.....	4,845	4,893	.....	382	6	.....
Flandre Orientale	886	21	1,799	.....	85	.....	.....	.....	.....	792	.....	2	.....	.....	7,833	7,879	3	455	6	.....
Hainaut	803	13	1,479	.....	55	.....	.....	.....	.....	411	.....	4	.....	.....	12,257	11,408	1	805	5	.....
Liége	429	13	1,158	.....	49	.....	.....	.....	1	339	.....	2	.....	.....	7,797	6,976	.....	492	4	.....
Limbourg	87	4	209	.....	10	.....	.....	.....	.....	65	.....	2	.....	.....	1,085	1,081	.....	79	1	.....
Luxembourg	211	6	795	.....	32	.....	.....	.....	.....	295	.....	1	.....	.....	769	801	.....	64	.....	.....
Namur	244	7	542	.....	25	.....	.....	.....	1	210	.....	3	.....	.....	2,051	2,030	.....	152	3	.....
Total	4,341	118	8,903	.....	396	.....	.....	.....	9	3,869	.....	21	.....	.....	42,344	40,691	4	2,752	27	.....

Table B.—*Investigation by the Ministry of Finance.*

Antwerp	330	7	618	.....	54	.....	1,009	12	1	385	.....	4	.....	402	2,754	2,688	3	172	2	5,619
Brabant	1,327	14	1,456	.....	77	.....	2,874	35	4	803	.....	11	1	854	6,660	5,992	1	496	5	13,154
West Flanders	571	20	793	.....	31	.....	1,415	123	2	541	.....	22	.....	688	2,746	2,727	3	202	10	5,688
East Flanders	332	3	535	.....	21	.....	891	1	1	507	.....	6	.....	515	3,678	3,455	1	218	2	7,354
Hainaut	904	7	1,664	.....	98	.....	2,673	52	1	809	.....	17	.....	879	8,814	8,469	1	581	13	17,878
Liége	316	10	769	.....	32	1	1,128	11	2	411	.....	9	.....	433	4,507	4,076	1	292	2	8,878
Limbourg	146	2	184	.....	5	1	338	5	.....	108	.....	.....	.....	113	808	821	.....	42	.....	1,671
Luxembourg	269	11	651	.....	25	.....	956	1	2	310	.....	3	.....	316	1,376	1,299	.....	108	6	2,789
Namur	269	5	459	.....	19	.....	752	14	.....	250	.....	3	.....	267	2,175	1,755	.....	132	3	4,065
Total	4,464	79	7,129	.....	362	2	12,036	254	13	4,124	.....	75	1	4,467	33,518	31,282	10	2,243	43	67,096

II.—Proportion of Belgian and French Coins according to their date.

Table C.—*Belgian 20-franc pieces.*

DATE.	Number of pieces coined each year.	Investigation by the National Bank.		Investigation by the Ministry of Finance.	
		Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.	Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.
1865	1,026,103	83	8	96	9
1866	531,963	.....	.....	23	4
1867	1,341,307	89	7	83	6
1868	1,381,549	81	6	121	9
1869	1,234,474	54	4	121	10
1870	3,191,203	194	6	236	7
1871	2,258,972	115	5	181	8
1872	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....
1874	3,046,350	419	14	584	19
1875	4,134,253	568	14	632	15
1876	2,069,682	317	15	347	17
1877	5,906,070	1,113	19	1,035	18
1878	2,555,400	1,030	40	1,005	39
Total	28,677,526	4,063	.....	4,464	.....

Table D.—*Belgian Silver 5-franc pieces.*

1832	37,352	8	21	22	58
1833	1,125,666	45	4	54	4
1834	349,976	6	2	17	4
1835	369,768	12	3	19	5
1836	.....	.....	.....	.....	.....
1837	.....	.....	.....	.....	.....
1838	5,203	1	20	6	115
1839	.....	.....	.....	.....	.....
1840	.....	.....	.....	.....	.....
1841	.....	.....	.....	.....	.....
1842	.....	.....	.....	.....	.....
1843	.....	.....	.....	.....	.....
1844	80,200	.....	.....	40	649
1845	.....	.....	.....	.....	.....
1846	.....	.....	.....	.....	.....
1847	699,601	38	5	76	10
1848	2,516,283	99	4	148	5
1849	6,922,095	448	6	613	8
1850	5,265,296	327	6	489	9
1851	3,707,922	361	9	534	14
1852	4,604,676	118	2	179	4
1853	2,426,598	182	7	186	7
1854	.....	.....	.....	.....	.....
1855	.....	.....	.....	.....	.....
1856	.....	.....	.....	.....	.....
1857	.....	.....	.....	.....	.....
1858	18,102	22	121	112	618
1859	.....	.....	.....	.....	.....
1860	.....	.....	.....	.....	.....
1861	.....	.....	.....	.....	.....
1862	.....	.....	.....	.....	.....
1863	.....	.....	.....	.....	.....
1864	.....	.....	.....	.....	.....
1865	907,360	320	35	111	12
1866	.....	.....	.....	.....	.....
1867	3,693,144	878	24	1,256	34
1868	6,570,564	2,774	42	4,073	62
1869	12,657,542	2,952	23	4,517	35
1870	10,468,075	3,316	31	4,723	45
1871	4,783,434	1,053	22	1,611	33
1872	2,045,000	591	28	920	45
1873	22,340,959	5,499	24	8,279	36
1874	2,400,000	590	24	1,065	44
1875	2,980,941	1,248	42	1,866	62
1876	2,159,885	1,244	57	2,143	99
1877	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....
Total	99,135,642	22,132	.....	33,059	.....

TABLE E.—*French 20-franc pieces (Gold).*

Date.	Number of pieces coined each year.	Investigation by the National Bank.		Investigation by the Ministry of Finance.	
		Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.	Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.
1803	58,262	3	5.1	3	5.1
1804	1,416,387	1	0.1	3	0.2
1805	520,311	2	0.4	1	0.2
1806	1,151,950	9	0.7	11	0.9
1807	839,444	7	0.8	9	1.1
1808	1,482,975	14	0.9	9	0.6
1809	720,110	10	1.4	5	0.7
1810	2,186,802	21	0.9	16	0.7
1811	4,070,593	31	0.8	39	1.0
1812	3,471,798	31	0.8	41	1.2
1813	3,037,054	26	0.8	29	1.0
1814	3,227,236	27	0.8	16	0.5
1815	2,768,992	31	1.1	18	0.7
1816	640,106	1	0.3	1	0.1
1817	2,428,882	22	0.9	18	0.7
1818	4,042,851	35	0.8	25	0.6
1819	2,611,313	15	0.1	10	0.4
1820	1,428,094	10	0.7	4	0.3
1821	20,207				
1822	233,937	3	1.2	4	1.7
1823	20,087	1	5.0	1	4.9
1824	324,477	22	0.7	15	4.6
1825	2,179,346	4	0.2	6	0.3
1826	46,153			4	8.7
1827	157,835				
1828	297,259	5	1.7	10	3.3
1829	13,729			7	51.1
1830	464,908	4	0.9	24	5.1
1831	2,356,946	18	0.8	25	1.0
1832	49,433			15	3.0
1833	394,303	5	1.3	25	6.3
1834	833,344	7	0.8	23	2.6
1835	152,927	1	0.6	17	11.3
1836	149,376	2	1.3	6	4.0
1837	44,889			12	2.7
1838	184,953	5	2.9	12	6.9
1839	1,033,454	12	1.2	21	2.0
1840	2,049,912	42	2.0	32	1.5
1841	618,753	10	1.6	18	2.9
1842	92,636			11	12.0
1843	141,330	1	0.7	12	8.5
1844	137,113	3	2.2	18	13.0
1845	5,957			16	268.0
1846	104,321			6	5.7
1847	385,301	9	2.3	6	1.5
1848	1,984,887	40	2.0	55	2.7
1849	1,355,478	46	3.4	70	5.1
1850	3,963,594	95	2.4	82	2.1
1851	12,585,214	278	2.2	213	1.7
1852	694,065	230	34.3	206	29.9
1853	15,648,201	124	0.8	132	0.1
1854	23,485,957	523	2.3	422	1.8
1855	18,399,783	430	2.3	312	1.7
1856	18,745,899	397	2.1	273	1.4
1857	19,193,214	489	2.6	316	1.6
1858	18,877,635	455	2.3	354	1.9
1859	26,166,075	656	2.5	471	1.8
1860	15,946,635	419	2.7	334	2.1
1861	4,030,253	96	2.4	68	1.6
1862	7,732,433	224	3.0	253	3.2
1863	7,672,993	264	3.5	216	2.8
1864	10,382,097	273	2.6	252	2.4
1865	6,039,858	308	5.0	232	3.8
1866	13,970,178	336	2.4	288	2.0
1867	7,439,514	284	3.8	310	4.1
1868	14,110,127	401	2.8	358	2.5

TABLE E.—*French 20-franc pieces (Gold)*—Continued.

Date.	Number of pieces coined each year.	Investigation by the National Bank.		Investigation by the Ministry of Finance.	
		Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.	Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.
1869	11,362,847	276	2.4	254	2.2
1870	2,717,440	71	2.6	97	3.6
1871	2,508,494	21	0.8	30	1.2
1872					
1873					
1874	1,215,985	6	0.4	28	2.1
1875	11,745,600	96	0.8	68	0.6
1876	8,824,658	413	4.7	318	3.6
1877	12,759,057	367	2.9	264	2.0
1878	7,090,088	262	3.7	208	2.9
Total	355,294,106	8,330		7,088	

TABLE F.—*French Silver 5-franc pieces.*

An IV et an V	8,279,877	15	0.2	12	0.1
An VI	2,383,460	7	0.3	12	0.5
An VII	3,795,941	10	0.3	10	0.2
An VIII	2,770,446	9	0.3	8	0.2
An IX	763,319	13	1.7	10	1.2
An X	968,557	8	0.8	9	0.9
An XI	2,285,851	11	0.4	5	0.2
1803	4,565,400	7	0.1	14	0.3
1804	8,460,663	13	0.2	14	0.1
1805	7,836,398	3	0.1	12	0.1
1806	4,485,649	23	0.5	12	0.2
1807	804,423	17	2.0	12	1.4
1808	9,382,286	43	0.4	35	0.3
1809	7,985,445	52	0.6	44	0.5
1810	10,344,480	52	0.5	56	0.5
1811	48,947,496	203	0.4	244	0.5
1812	31,045,613	116	0.3	168	0.5
1813	26,002,853	96	0.3	131	0.5
1814	12,157,707	43	0.3	72	0.6
1815	7,532,048	30	0.4	34	0.4
1816	6,836,669	28	0.4	29	0.4
1817	7,008,958	22	0.3	40	0.5
1818	2,419,939	10	0.4	13	0.5
1819	4,188,801	16	0.3	20	0.4
1820	3,612,292	15	0.4	22	0.6
1821	13,355,182	39	0.2	70	0.5
1822	19,688,279	76	0.3	102	0.5
1823	16,068,150	59	0.3	89	0.5
1824	22,314,567	126	0.5	179	0.8
1825	14,573,894	55	0.3	77	0.5
1826	17,746,462	123	0.7	191	1.0
1827	29,916,081	227	0.8	344	1.1
1828	31,426,153	247	0.8	316	1.0
1829	19,929,090	138	0.7	233	1.1
1830	23,739,223	339	1.4	532	2.2
1831	40,658,479	1,306	3.2	1,897	4.6
1832	26,861,063	875	3.2	1,261	4.6
1833	30,885,119	1,137	3.6	1,785	5.7
1834	42,306,804	1,431	3.3	1,883	4.4
1835	19,162,221	557	2.9	758	4.0
1836	8,303,765	294	3.5	382	4.6
1837	21,840,508	748	3.4	1,026	4.7
1838	17,248,016	595	3.4	834	4.8
1839	14,307,757	482	3.3	759	5.3
1840	12,261,177	425	3.4	551	4.5
1841	14,659,936	602	4.8	797	5.4
1842	13,175,982	454	3.4	652	4.9

TABLE F.—*French Silver 5-franc pieces*—Continued.

Date.	Number of pieces coined each year.	Investigation by the National Bank.		Investigation by the Ministry of Finance.	
		Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.	Number of pieces of each year found in the investigation.	Comparison of the number of pieces found with the total coinage of the year to which they belong—proportion, 1 to 100,000.
1843	14,371,790	519	3.6	803	5.5
1844	13,395,112	547	4.1	836	6.2
1845	16,780,658	506	3.4	858	5.1
1846	8,442,203	285	3.4	416	4.9
1847	14,322,006	435	3.0	652	4.5
1848	23,810,589	673	2.8	893	3.7
1849	40,766,309	1,155	2.8	1,580	3.8
1850	16,120,678	428	2.7	788	4.9
1851	11,499,290	355	3.0	499	4.3
1852	13,990,200	337	2.4	531	3.8
1853	3,891,632	24	0.6	45	1.2
1854	10,615	.....	.....	22	207.2
1855	4,861,173	121	2.5	173	3.6
1856	9,155,481	157	1.6	252	2.7
1857	93,406	1	0.9	34	36.2
1858	26,790	1	3.8	25	93.6
1859	3,365	1	30.0	51	1,516.0
1860	.....	.....	.....	.....	.....
1861	22,098	1	4.5	6	27.0
1862	21,129	3	14.2	24	113.0
1863	21,687	3	14.2	44	203.7
1864	32,168	1	3.1	8	25.0
1865	97,134	3	3.1	13	13.2
1866	37,693	10	26.4	46	121.0
1867	10,810,312	835	7.7	1,089	10.0
1868	18,724,110	1,729	9.3	2,241	12.0
1869	11,652,857	981	8.4	1,222	10.4
1870	10,729,670	1,109	10.3	1,432	13.4
1871	942,181	55	5.8	102	10.8
1872	77,838	10	12.8	38	48.1
1873	30,929,809	264	0.8	425	1.2
1874	11,999,202	85	0.7	154	1.2
1875	15,000,000	72	0.4	122	0.8
1876	10,532,263	23	0.2	54	0.5
1877	2,292,857	6	0.2	28	0.8
1878	363,130	1	0.2	1	0.2
Total	1,012,120,094	21,993	.....	31,263	.....

EXHIBIT C.

DOCUMENT PRESENTED BY COUNT RUSCONI.*

ADDRESS OF THE SOCIETY OF THE NETHERLANDS FOR THE PROMOTION OF INDUSTRY.

To his Majesty the King:

SIRE! The Society of the Netherlands for the Promotion of Industry, assembled in General Convention at Deventer, has been seriously impressed with the danger which threatens the monetary circulation, not only of the Netherlands and their colonies, but of all civilized countries, by the great and ever increasing depreciation of Silver.

Industry, of which our society is the organ, has the deepest interest in seeing a good monetary system established. The general assembly of our society has accordingly invited its Directors to submit the following considerations to the enlightened wisdom of its August Protector.

In 1847 our country enjoyed the good fortune to have bestowed on it a good monetary system, which introduced the Single Standard of Silver. This law was not the result of purely speculative theories, nor of an exaggerated fear of the future depreciation of Gold, as has been often, though erroneously, stated; for the Gold deposits of California and Australia were not yet known in 1847. That law was the expression of all that experience had taught us during the preceding thirty years; and for twenty-five years the Netherlands have been entirely satisfied with it. We have now to deplore that the legislative measures of a great neighboring nation and the consequences which they have entailed on other nations are forcing our country to change its monetary legislation.

We, however, fully share the opinion of Your Majesty's government that, under existing circumstances, the Netherlands ought to abandon the Silver Standard. We have witnessed with regret the failure of former legislative propositions looking to that end, and have seen with satisfaction the adoption of the law of June 6, 1875, by virtue of which a Gold Coinage has been adopted side by side with our Coins of Silver, and that the interdict against coining Silver, except for account of the State, which had been decreed at an earlier date, is still maintained.

We, moreover, share the opinion of the government, that under existing circumstances the Netherlands have no other alternative than to adopt the Gold Standard.

There is, nevertheless, another state of things which seems to us much more desirable, but which does not depend exclusively upon the action of this country. We mean an understanding, as far as possible to be arrived at, between civilized nations, for the adoption of the Double Standard, with a uniform proportion to represent the intrinsic value of Gold and Silver Coins. For that proportion the ratio of fifteen and a half to one, commends itself in many ways. To the universal adoption of that system we look for the most effectual means of checking the continued depreciation of Silver. If the majority of influential States were to adopt it, we are persuaded that the value of Silver would rise again, after a certain interval, to its old level.

* NOTE TO THE ENGLISH JOURNAL.—The translation of this document communicated to the Bankers' Magazine (New York) for February, 1878, by Hon. George Walker, of New York, is, with his permission, here reproduced.

The present depreciation of Silver has, no doubt, been brought about by various causes. British India, towards which for a long time past there has flowed a steady tide of Silver, is, at the present time, absorbing only a small quantity of that metal. The Empire of Germany has also in store a very large quantity of demonetized Silver; and notwithstanding the prudent manner in which it is disposing of it, the certainty that this Silver must, sooner or later, come upon the market, depresses the price of Silver bullion. The production of the Silver mines of North America has been largely developed in the last few years, while that of Gold is more or less stationary. All these causes combined could not fail to exercise a very powerful influence on the value of Silver. The first two are, perhaps, temporary; the third seems of a more permanent nature: there is, however, a fourth cause which is likely to exert a prolonged and depressing influence on the value of Silver, if steps are not taken to remove it.

We refer to the various changes which have been made, or which are in preparation, in the monetary legislation of different countries. No sooner had Germany adopted the Gold Standard, than the Scandinavian States hastened to follow its example; the Netherlands have entered upon the same road, and the Latin Union is reducing in an energetic manner the fabrication of Silver Money. Under the influence of all these legislative measures, we should have expected to see Silver fall in price, but the reality has gone far beyond what was anticipated.

During the thirty years which preceded the great development of Gold production in California and Australia the average annual price of standard Silver in the London market fluctuated only between 59½ to 59¾ pence per ounce. It would have been in the natural order of things that the discovery of those vast deposits of Gold would cause the price of that metal to decline, or, in other words, would have raised the price of Silver in a degree altogether exceptional. This result was rendered the more probable by the fact that the immense quantity of Gold produced by California and Australia was added to a relatively small quantity of that metal previously distributed among the nations of the globe. For this reason, we might have expected that the immense and rapid increase of Gold production would have caused a depreciation in its price, far more important than could have been visited on Silver by the development of the new North American mines, since the increased volume of Silver is substantially lost in the immense stock of that metal already existing, a stock which was estimated, in 1845, to be from forty to fifty times greater than that of Gold.

Nevertheless what did we see? In the period of five years, from 1852 to 1856, being that of the greatest Gold production, Gold of the value of about 2,000 millions of florins [$770,000,000] was produced, against a production of Silver of the value of about 525 millions [$202,125,000]. The total quantity of the precious metals extracted from the mines was composed of 79.2 per cent. of Gold to 20.8 per cent. of Silver. Nevertheless the price of *Silver did not advance above an average of sixty-one and a half pence. It attained an average of sixty-two pence in* 1859, *which was not, however, the year of the greatest production.*

In the period of five years, from 1871 to 1875, during which the mines of North America made the most rapid advance, the total production of Silver throughout the world is estimated at a value of 930 millions of florins [$358,000,000].

In this same period the production of Gold reached a figure of 1,500 millions of florins [$570,000,000]. Thus the total production of the precious metals was composed of 61.7 per cent. of Gold, and of 38.3 per cent. of Silver.

It is, therefore, apparent that the quantity of Silver injected into the circulation is increased in a much smaller proportion than was that of Gold at the earlier period. Yet the fact remains that Silver gradually declined to 57⅜ pence, preparatory to a sudden drop, at the beginning of this month (July, 1876), to the unprecedented price of 47 pence.

The cause which prevented Gold from undergoing the depreciation anticipated is well understood. Almost all the Gold of California and Australia, as soon as it arrived in Europe, went into the French Mint, and was thence issued in coined Money to the

amount of nearly 6 milliards of francs [$1,200,000,000]. It has been well said that the monetary system of France served as a parachute to the fall of Gold. Now, in the case of silver, exactly the opposite has happened. At the very juncture when Asia is absorbing less Silver than formerly, and when the production of the Silver mines of North America is increasing, the larger number of mints are closing their doors to Silver, or admitting it in very limited quantities.

The changes which have taken place in the monetary legislation of several countries appear to us to be the principal cause of the depreciation of Silver, and a cause which is of a permanent character. But now that the cause of the evil is ascertained the remedy seems to us not difficult to discover.

If all civilized countries were to reopen their mints to Silver the same result would follow which formerly attended the increased production of Gold, and the value of Silver would resume an upward direction.

Of course no isolated country would willingly take the risk of seeing its Money of higher value exported and replaced by other Money more or less depreciated.

But this danger would disappear from the moment that all countries, or even the majority of countries, should agree to adopt the Double Standard with a uniform relation between Gold and Silver; that of fifteen and a half to one being, in our opinion, the most easily attainable.

Many distinguished economists, among whom it is sufficient to mention Wolowski, Courcelle-Seneuil, E. de Laveleye, Seyd, Cernuschi, and W. C. Mees, have maintained the position that if all civilized nations were to adopt the Double Standard, with a uniform proportion, a stability in the respective values of the two metals would be created, such as could not be attained in any other way.

While entertaining a very high respect for the opinion of the eminent authors who combat this position, *we must, nevertheless, avow our belief that under existing circumstances the general adoption of the Double Standard, with the proportion of fifteen and a half to one, would be the best, and perhaps the only method of preventing the disturbance which now threatens all monetary transactions, a disturbance the disastrous consequences of which are, perhaps, incalculable.*

If a uniform legal proportion between the value of Gold and Silver were to be very generally adopted, it is evident that the expulsion of one of the metals, which, from accidental causes, might have acquired a higher value, and the admission of the other, which was relatively more or less depreciated in one of the countries of the large domain occupied by the Double Standard, would lead to a greater supply of the first metal and a greater demand for the second in other countries. In this way the degree of fluctuations between the two metals, by extending it over a larger surface, would be reduced to a minimum. We should enjoy, on a vast scale, the compensatory action which is peculiar to the Double Standard system.

Such is the result which might be anticipated from a general agreement between a great majority of civilized countries to adopt the Double Standard, with a uniform proportion between Gold and Silver.

The ratio of value between Gold and Silver would thus attain a degree of stability which, if not absolute, would certainly be very great.

The fluctuations in the power of acquisition, depending on variations in the comparative value of the two metals, would be reduced to a minimum.

Provision would be made beforehand against disturbances which will be inevitable, as long as important countries which adopt the Gold Standard continue to pour upon the market great quantities of their demonetized Silver.

A signal service would be rendered to the commerce between Europe and the countries of Asia, which always require great quantities of Silver for their national circulation, by giving a less fluctuating value to one of the principal elements which serve as the bases for exchange.

FINALLY, THE RESUMPTION OF SPECIE PAYMENTS IN COUNTRIES IN WHICH A LEGAL-TENDER PAPER CIRCULATION STILL PREVAILS, WOULD BE RENDERED EASIER.

In view of all the advantages which we have here enumerated, advantages which in our judgment are far from being imaginary, would it not be desirable to convene, at an early day, not a diplomatic Congress, but an International Monetary Conference, to which all governments might send men specially qualified for the service, and most conversant with this subject?

To such a conference, the two following questions might be submitted:

Is it, or not, probable that if all civilized nations were to adopt the Double Standard, with a uniform proportion of fifteen and a half to one, as the intrinsic value of Gold and Silver Legal-Tender Money, a stability in the relative value of the two metals would be thus obtained during a long period of time, which, if not absolute, would certainly be very great; and that the oscillations in that value would be very small, compared with those which have taken place during the course of the present century.

If this question should be decided in the affirmative, what measures should be submitted to the several governments, in order to secure this desirable uniformity.

Without anticipating the answer which competent judges might give to these questions, we venture to express the opinion that it would not be desirable to agitate, at the same time, the question of the unification of Coinage. Every country holds, with a certain tenacity, to its national Money, around which its historical traditions cluster; and the attempt to combine on a new international monetary unit would meet with a formidable opposition in nearly all countries against any unification of Moneys.

The several countries should simply engage that if they have the Single Gold Standard they will add to it legal Coins of Silver; if they have the Silver Standard, that they will add to it legal Coins of Gold, with a uniform proportion of 15½ to 1. Countries having the Double Standard, but a different proportion than that of 15½ to 1, would be required to conform to that proportion. In all countries of the new monetary union all debts should be payable indifferently in Money of one or the other metal; individuals should have the right to have bullion of either metal converted into Legal-Tender Coins, according to the statutory conditions prevailing in each country.

The Monetary Conference might perhaps take into consideration the following question: Would it be possible, without detriment to the great object in view, and to the principle enunciated, to admit a certain *tolerance* in the proportion of 15½ to 1, in the same way that a certain limited tolerance is admitted in the weight and fineness of Coins? Such a tolerance would probably render the adhesion of certain countries to the plan less difficult. This is, however, a secondary question to which we call attention only subsidiarily.

Other questions might be treated by the Monetary Conference, as, for example, what would be the future of Silver from the time that all the great nations should adopt the Gold Standard? If all, on the contrary, were to unite on the Double Standard, would it be desirable to take international measures in respect to the expense of Coinage, to the counterfeiting of the Moneys of one country by the subjects of another, &c.?

The Monetary Conference having no other mission than to enlighten the Governments participating in it (the latter reserving to themselves entire liberty of action), could proceed with a certain degree of freedom, could throw light on different points of interest which the question involves, and could prepare the way, in some measure, for a diplomatic Congress, before which the questions to be settled would necessarily be more clearly defined and limited.

The government which shall gain the adhesion of other governments to the plan of convoking an International Monetary Conference will, in our opinion, render an eminent service, not only to its own citizens, but to all the countries of the world.

According to a communication made by the Minister of Finance, in the month of May, 1876, it appears that the government of Your Majesty has considered the plan of an international agreement, looking to the general adoption of the Double Standard, but has decided that all attempts in that direction would be without avail. Since

that time, however, the depreciation of Silver has gone so much further than before, that a new attempt would, perhaps, meet with a more favorable reception.

We, nevertheless, admit the possibility that every effort for a general understanding may fail, and that it may, therefore, become necessary to give up all hope of seeing the Double Standard, with a uniform proportion between the intrinsic value of Gold and Silver Money, generally adopted. If such should prove to be the case, the Society for the Promotion of Industry, without entering into details, ventures to express the opinion that it would be then desirable to put an end to the present transitional state of our monetary system, and to adopt definitively the Gold Standard.

As to the monetary system of our colonies in India, our Society takes the liberty of saying that this question demands a prompt solution, both in the interest of the circulating medium of the colonies and in that of the mother country. We consider this matter too urgent to await the issue of international negotiations, and that it is desirable that a provisional law of the character of that of June 6, 1875, should, without delay, be made the order of the day.

We share the opinion of those who recommend the following measures for protecting the Dutch Indian Colonies against such injury as British India is at the present moment sustaining from the extraordinary fall of Silver, namely, the admission of our ten-florin piece into the circulation of the Colonies, the export of Gold pieces by the Government to India as rapidly as the necessity for them is experienced; the issue of bills of exchange by the Government to counteract a possible rise in the exchange, an authorization to the Governor-General to sell limited amounts of Silver pieces as Your Majesty may direct, after having withdrawn them from circulation and placed them beyond the possibility of reissue.

These measures would have the advantage of being provisional merely, and of leaving the question open for future decision whether to adopt at a later period the Single Gold Standard or the Double Standard for the Colonies. But if we would protect our Indian possessions against great disturbances, it is important that the provisional law touching the monetary system of these Colonies be brought under discussion without delay.

We pray Your Majesty to pardon us if the gravity of the subject has caused us to overstep the ordinary limits of an address. The interests of commerce and of industry have always secured the most lively sympathy from Your Majesty. They are more intimately allied to a good monetary system than is generally supposed.

We have the honor to be, with the most profound respect, Sire, Your Majesty's very faithful and humble servants.

THE DIRECTORS OF THE SOCIETY OF THE NETHERLANDS FOR THE PROMOTION OF INDUSTRY,

VROLIK, *President.*
F. W. VAN EEDEN, *Secretary.*

HAARLEM, *July*, 1876.

EXHIBIT D.

NOTE ON THE MONETARY LEGISLATION AND ON THE FABRICATION OF MONEY IN THE SWISS CONFEDERATION SINCE 1850.

I.

LEGISLATION.

Until the Constitution of 1848, the prerogative of Coinage appertained to the Cantons. There had resulted from this a very imperfectly defined system, which was connected in the majority of the Cantons with the old Swiss franc. This unit had not everywhere the same value, but represented on the average 1 fr. 40 cent. of French Money; apart from a very great variety of indigenous Coin, old and new, quite insufficient in point of quantity to keep up the circulation of the country, the latter was chiefly composed of Silver Money of Austria, South Germany, and France.

The Swiss law of the 7th of May, 1850, put an end to this state of things, as motley as it was inconvenient. It introduced as unit the French franc in Silver, gave legal currency only to Silver Coins coined conformably with the Law of Germinal, year XI, decreed the withdrawal of all the old Swiss Coins, and excluded Austrian and German Coins.

This system, established and consolidated with equal rapidity and ease, was disturbed by the constantly increasing invasion of Gold, which in a few years, notwithstanding the letter of the law, displaced the metal which had been deemed the basis of the Swiss circulation, and caused not only the five-franc dollars to disappear, but also all the fractional Silver Coins which were not worn or clipped.

A new law of the 31st January, 1860, then intervened to give Legal Tender to the Gold Coins coined conformably to the French system, and decreed the withdrawal of the old Silver pieces of 2 francs, 1 franc, and 50 centimes, coined at the standard of $\frac{900}{1000}$; replacing them by fractional pieces of a new kind, coined at a fineness of $\frac{835}{1000}$.

The report accompanying this law, signed by the committee of the National Council who had proposed all of these measures, showed explicitly, with full explanation, that the Single Gold Standard was the idea and consequence of these changes.

In 1865, Switzerland, with Belgium, France, and Italy, signed the Treaty of 23d December, which gave birth to the monetary union called Latin, and drawing closer the economic bonds between the four States, gave rise after the depreciation of Silver to a series of Conferences of which the first result was the limitation of the Coinage of 5-franc dollars, and the last, the entire suspension of the Coinage of these pieces.

II.

THE COINAGE OF SWITZERLAND SINCE 1850.

I.—*Fractional Silver Coins, 900 fine, in the years* 1850–1851–1852 (*Law of* 1850).

In 2-franc pieces	f. 5,000,000
In 1-franc pieces	5,750,000
In 50-centime pieces	2,250,000
	13,000,000

All this issue has been retired and the fractional Coins of the fineness of 900 are no longer Legal Tender.

II.—*Issues of Fractional Coins of the Fineness of* 800, *years* 1860-1863 (*Law of* 1860).

2-franc pieces	f. 7,000,000
1-franc pieces	3,500,000
	10,500,000

These Coins have likewise been retired in conformity with the obligation imposed upon Switzerland by the Treaty of 1865, and are no longer Legal Tender.

The time of redemption, after various adjouruments, expired June 30, 1878; up to which time 7,922,100 francs had been presented for redemption.

III.—*Issues of Fractional Coins of the Fineness of* 835 (*Treaty of* 1865).

	1875.	1876.
2-franc pieces	982,250	f. 2,500,000
1-franc pieces	1,035,500	3,020,000
50-centime pieces	1,000,000	2,012,000

Total (including former issues), f. 11,032,000.

IV.—*Dollars of Five Francs.*

1852	f. 500,000
1873	10,000
1875	7,978,250
Total	8,488,250

Switzerland, since the law of 1860, which gave Legal Tender to Gold and placed it in the first rank in the circulation, has never struck Gold Coins; her citizens preferring, in spite of a special law on the Coinage of Gold Coins, (December 22, 1870), to make use of the monetary establishments of Paris and Brussels, which are better situated geographically than the Mint at Berne.

EXHIBIT E.

DOCUMENTS RELATING TO THE COINAGE IN THE SCANDINAVIAN COUNTRIES IN VIRTUE OF THE TREATIES OF 18TH OCTOBER, 1872, AND 27TH MAY, 1873, AND RELATING TO THEIR FIDUCIARY CIRCULATION.

[100 francs = 72 kroner (crowns).]

1.—*Fabrication at the Mint in Copenhagen to the 1st of July*, 1878.

Designation of the Coins.	Number of Coins struck.	Value in crowns.	Total in value.
Gold ..... 20 kr.	1,504,306	30,086,120 00	34,754,640 00
Do 10	466,852	4,668,520 00	
Silver 2	4,876,975	9,753,950 00	
Do 1	5,323,527	5,323,527 00	
Do ..... 50 öre.	.....	.....	18,148,229 80
Do 25	8,138,500	2,034,625 00	
Do 10	10,361,278	1,036,127 80	
Bronze 5	2,969,625	148,481 25	479,828 45
Do 2	11,875,718	237,514 36	
Do 1	9,383,284	93,832 84	
Total	54,900,065	53,382,698 25	53,382,698 25

2.—*Fabrication at the Mint in Stockholm to the 1st July*, 1878.

Designation of the Coins.	Number of Coins struck.	Value in crowns.	Total in value.
Gold ..... 20 kr.	1,211,305	24,226,100 00	31,086,910 00
Do 10	686,081	6,860,810 00	
Silver 2	731,645	1,463,290 00	
Do 1	6,595,922	6,595,922 00	
Do ..... 50 öre.	2,375,559	1,187,779 50	11,643,553 15
Do 25	7,109,155	1,777,288 75	
Do 10	6,192,729	619,272 90	
Bronze 5	3,364,900	168,245 00	402,165 00
Do 2	7,127,000	142,540 00	
Do 1	9,138,000	91,380 00	
Total	44,532,296	43,132,628 15	43,132,628 15

3.—*Fabrication at the Mint in Kongsberg to the 1st July*, 1878.

Designation of the Coins.	Number of Coins struck.	Value in crowns.	Total in value.
Gold ..... 10 kr.	449,776	8,995,520	9,436,650
Do 10	44,113	441,130	
Silver 2	300,000	600,000	
Do 1	1,600,000	1,600,000	
Do ..... 50 öre.	1,600,000	800,000	4,520,000
Do 25	3,200,000	800,000	
Do 10	7,200,000	720,000	
Bronze 5	2,500,000	125,000	320,000
Do 2	3,750,000	75,000	
Do 1	12,000,000	120,000	
Total	32,643,889	14,276,650	14,276,650

Total of Coinage in pursuance of the Scandinavian Monetary Treaty.

Gold: Denmark	34,754,640 kr.		=	48,270,333 fr.
Sweden	31,086,910		=	43,176,264
Norway	9,436,650		=	13,106,458
Total in Gold	75,278,200		=	104,553,055
Silver: Denmark	18,148,229 kr.	80 öre.	=	25,205,875 fr.
Sweden	11,643,553	15	=	16,171,601
Norway	4,520,000	00	=	6,277,778
Total in Silver Tokens	34,311,782	95	=	47,655,254
Bronze: Denmark	479,828 kr.	45 öre.	=	666,428 fr.
Sweden	402,165	00	=	558,563
Norway	320,000	00	=	444,444
Total in Bronze	1,201,993	45	=	1,669,435

Total Coinage of fractional Tokens of Silver and of Bronze in the Scandinavian Monetary Union is therefore 35,513,776 kr. 40 öre = 49,324,689 francs, or *per capita* 4 kr. 25 öre = 5 fr. 91 centimes.

A certain number of fractional Coins of older mintage of the same value as the new are still in circulation in Sweden and Norway.

Credit Circulation in the three Scandinavian Kingdoms the 1st of July, 1878.

	Credit circulation, in kroner.	Metallic reserve, in kroner.
Denmark National Bank	60,638,150	36,586,712
Sweden Bank of the Kingdom	28,388,030	13,885,773
Sweden "Enskilda" banks	43,075,055	10,915,115
Norway National Bank	38,152,490	25,533,906
Total in the three Kingdoms	170,253,725	86,921,506
Or in francs	236,463,507	120,724,314

DR. O. J. BROCH.

LIST
OF
MEMBERS OF THE CONFERENCE.

LIST

OF

MEMBERS OF THE CONFERENCE.

AUSTRIA-HUNGARY.

Count VON KÜFSTEIN,
Chargé d'Affaires of Austria-Hungary at Paris.

C. VON HENGELMÜLLER,
First Secretary of the Austro-Hungarian Legation at Paris.

BELGIUM.

EUDORE PIRMEZ,
Ex-Minister of the Interior. Member of the Chamber of Representatives. Formerly member of the Monetary Conference convoked by the Belgian Ministry of Finances of 1873.

CHARLES AUGUST GARNIER,
Councilor of Legation of Belgium at Paris.

FRANCE.

LÉON SAY,
Minister of Finance under the Presidency of M. Thiers and of Marshal McMahon. Member of the Institute. Senator. Author of the Report of the Budget Committee of 1875 on the payment of the German War-Fine. Translator of Goschen's "Theory of Foreign Exchanges."

CHARLES JAGERSCHMIDT,
Minister Plenipotentiary in the Department of Foreign Affairs.

JEAN LOUIS ANDRÉ RUAU,
Director of the Administration of Coins and Metals under the Empire and under the Republic.

GREAT BRITAIN.

GEORGE J. GOSCHEN,
(Rt. Hon.) Member of Parliament. Late First Lord of the Admiralty, 1867. Late Chairman of the Select Cimmittee of the House of Commons on the Depreciation of the price of Silver. Author of "Theory of the Foreign Exchanges." (London, 1872.)

HENRY HUCKS GIBBS,
Ex-Governor, and a Director of the Bank of England.

Sir THOMAS L. SECCOMBE,
Financial Secretary of the Secretary of State for India in Council.

WILLIAM BRAMPTON GURDON,
An officer in the Treasury Department. Secretary of the British Commission.

GREECE.

NICHOLAS P. DELYANNI,
Chargé d'Affaires of the Hellenic Government at Paris.

ITALY.

COUNT CHARLES RUSCONI,
Formerly Minister of Foreign Affairs.

COMMANDER CESAR BARALIS,
Director of the Mint of Milan. Formerly member of the Conference of the Latin Union, 1876.

CHEVALIER CONSTANTIN RESSMANN,
First Secretary of the Italian Legation at Paris. Formerly member of the Conferences of the Latin Union, 1874, 1875, and 1876.

THE NETHERLANDS.

A. VROLIK,
Ex-Minister of Finance. Formerly member of the International Conference of 1867. Author of a work on the "Recoinage of the Silver Coins and the Demonetization of Gold." (Utrecht, 1853.) President of the Society of the Netherlands for the Promotion of Industry.

W. C. MEES,
President of the Bank of the Netherlands. Formerly member of the International Conference of 1867.

RUSSIA.

T. DE THOERNER,
Privy Councilor. Member of the Council of the Minister of Finance.

SWEDEN AND NORWAY.

[SWEDEN.]

C. FR. WAERN,
Ex-Minister of Finance. President of the College of Commerce of Sweden.

[NORWAY.]

O. J. BROCH, Dr. Juris,
Ex-Minister of Marine and Postmaster-General. Formerly member of the International Monetary Conference of 1867.

SWITZERLAND.

CHARLES FEER-HERZOG,
Member and Ex-President of the Federal Council. Formerly Commissioner for the Negotiation of the Monetary Treaty of 1865, and member of the International Monetary Conference of 1867, and of the Conferences of the Latin Union. Author of Report on Coinage to the Assembly in 1859, etc., etc.

CHARLES EDOUARD LARDY, Dr. Juris,
Councilor of the Swiss Legation at Paris. Formerly member of the Conferences of the Latin Union.

THE UNITED STATES OF AMERICA.

REUBEN E. FENTON,
Ex-Senator, Ex-Governor of the State of New York.

WILLIAM S. GROESBECK,
Ex-member of Congress. Formerly expert member of the Congressional Monetary Commission of 1876, 1877.

General FRANCIS A. WALKER,
Superintendent of the Census, Professor of Political Economy in Sheffield Scientific School in Yale College. Author of Statistical Atlas of the United States; "Wages," 1877; "Money," 1878, &c.

S. DANA HORTON,
Counselor at Law. Author of "Silver and Gold, and their Relation to the Problem of Resumption, 1876;" An Address to Congress against the Bland Bill, 1876–'77, &c.

REPORT

OF

THE UNITED STATES COMMISSION.

REPORT

UPON THE

INTERNATIONAL MONETARY CONFERENCE BY THE COMMISSION WHICH ATTENDED IT ON BEHALF OF THE UNITED STATES.

TO THE PRESIDENT OF THE UNITED STATES:

The undersigned, Commissioners under the act of February 28, 1878, have the honor to report as follows:

After receiving in person at Washington, on the 28th of June, the instructions of the Department of State, your Commissioners proceeded severally to Europe, assembling at Paris on the 6th of August, in preparation for the opening of the Conference on the 10th of that month. Mr. S. Dana Horton, designated by Congress as the secretary of the Commission, having been detained in the United States, did not reach Paris until the 15th. Upon his arrival, Mr. Horton was presented to the Conference at its second session, and upon the request of the American Delegates, in accordance with instructions from the Department of State, was admitted to a seat in the Conference.

The Conference opened on the 10th of August, at the Ministry of Foreign Affairs.

Upon the nomination of the Delegation of the United States, M. Léon Say, the French minister of finance, was chosen president. Mr. Fenton, chairman of the United States Delegation, was then made vice-president. The secretaries were appointed from the regular staff of the French diplomatic service. A list of the accredited members of the Conference will be found in the journal.

The Conference held seven sessions between the 10th and 29th of August. The journal, which is annexed to and made a part of this report, shows the order of proceedings and the course of discussion, the propositions offered at the second session by the Delegation from the United States, the formal response by a majority of the European Delegates, and our reply thereto.

The early sessions of the Conference disclosed two facts: First, that political complications would combine with economic objections to prevent the accomplishment of the immediate object of the act under which your Commission was constituted, namely, the establishment, by international agreement, of a fixed ratio, in the Coinage, between Gold and Silver; second, that the views of the Delegates from the majority of the countries represented, and especially the more populous and territorially extensive countries, were favorable to the ultimate object of the act, namely, the restoration of Silver to its rank as Money of full power in Europe and America.

In the latter respect the Congress of 1878 presented a strong contrast to its sole precursor, the Monetary Conference held in Paris in 1867.* That Conference, animated by a controlling desire to secure a uniformity of money pieces among the nations there represented, and deeming that it saw in Gold-mono-metallism the means of doing this, recommended that policy, with very little consideration of the sacrifices it would require from production and trade. By an almost unanimous vote, that Conference pronounced in favor of Gold, Silver to be retained as Money of full power only during the period of transition to Gold, which might be longer or shorter in the case of different States.

Inasmuch as eleven years have been allowed for discussion and reflection since this memorable declaration was made; inasmuch as the rejection of Silver as Money of full power has in part been carried out; and inasmuch as great loss has already been entailed upon production and trade, as the initial cost of that movement, the scheme for the general demonetization of Silver throughout the civilized States, if indeed it were sound and judicious in 1867, ought to stand more firmly still in 1878.

Yet it was the unmistakable sentiment of this Conference, convoked by the United States, that the demonetization of Silver had proceeded farther than was compatible with the interests of Europe and America; and while diplomatic considerations prevented the formal declaration of any opinion which would have been offensive to the minority, the Conference did not hesitate to declare that the monetary functions of Silver

*The first general International Monetary Conference was convened by the French Government in pursuance of the policy which had achieved the quadruple Monetary Treaty of 1865, the so-called Latin Union. This treaty contained special provisions looking to the accession to it of other States. Upon its ratification in 1866 by the legislatures of the contracting powers, invitations were issued by France to a general Conference in the following year. Twenty States, comprising all the important nations of Europe, and the United States of America, were represented; the Conference held eight sessions at the Ministry of Foreign Affairs, Paris, between June 17 and July 6, 1867.

ought to be maintained as well as those of Gold. Mono-metallism, in the sense of the Conference of 1867, was advocated in that of 1878 by only three Delegations, none of which represented populous States.

In this connection the position of England is worthy of special remark. That nation had set the example of demonetizing Silver, and after the Conference of 1867 recommended the general adoption of Gold-mono-metallism, the Chancellor of the Exchequer, in Parliament, congratulated the country that Europe was preparing to follow in the same course.* The Conference of 1878 was attended on behalf of Great Britain by a Delegation eminent for experience, and economical authority, whose chairman, the head of the parliamentary committee of 1876 on the Depreciation of Silver, declared that universal Gold mono-metallism was not only utopian, but would prove a false Utopia; that the consequences of the German demonetization had been greatly to derange trade and disturb international exchanges; and that were the movement for the rejection of Silver as Money of full power to proceed from State to State the results would not be less than disastrous.†

It is as the greatest commercial nation of the world that England has had especial occasion to experience the necessary effects of the demonetization of Silver; and it is to the severity of that experience, even in the first stages of the movement, that the Conference of 1878 owed the earnest warnings against further progress in the same direction which were given by the English Commission. Under the bi-metallic system which remained in force in France and the countries associated with her until suspended in consequence of the German demonetization, these countries acted as "equalizing machines," taking the metal which fell and selling the metal which rose, and thus kept the relative value of the two close to a given point, viz, one ounce of Gold for fifteen and a half ounces of Silver, the ratio fixed by the French Coinage law. Thus it was, and thus only it could have been, that Silver came to have a so-called "normal price" [of nearly 61*d.* per ounce at the British Standard], from which it never departed widely prior to 1873.

The effect of the German demonetization, and of the closing of the mints of the Latin Union to Silver, has been to destroy the par of exchange between Europe and Asia; to introduce into the commercial dealings of two of the great divisions of the world a degree of uncertainty making trade highly speculative, the fluctuations in the price of Silver often far exceeding the usual rates of business profit. The intercourse between Gold countries and Silver countries has thus been subjected to difficulties precisely the same in kind as those which beset the intercourse of specie-paying nations with those suffering from an irre-

* See page 381.

† "I have spoken against the theory of those economists who argue that the Gold Standard should be everywhere introduced; I have stated that I saw in it great inconvenience, great danger, and even great disaster. To that opinion I decidedly adhere. I believe it would be a misfortune for the world if a propaganda for a sole Gold Standard should succeed." (Remarks of Mr. Goschen, seventh session.)

deemable paper circulation. These difficulties, it is manifest, must be perpetuated in time and aggravated in degree should the movement for the rejection of Silver continue. We have here the explanation of the change in the attitude of England since 1867, and of the willingness of the Delegation of that country in 1878 to assist, so far as could be done without compromising the position of England as a Gold-using State, in promoting the use of Silver equally with that of Gold.

The States which had, in the past, performed this grand service to the world appeared in the Conference of 1878 with a divided opinion; and it is, we think, to the delicate relations, political and financial, of the Latin Union, that the failure of the Conference to adopt any positive measures is primarily to be referred.

Switzerland appeared as the uncompromising advocate of Gold mono-metallism for Europe.*

The delegation from Belgium, also, was unfavorable. The position of this State was a source of disappointment. Of late years Belgium, as a member of the Latin Union, has supported the bi-metallic principle. Into the causes which resulted in a Delegation at the present Conference openly favoring Gold-mono-metallism it would not be proper for your Commissioners to inquire; but whether these causes were economical or political, the defection of Belgium at this juncture proved a most serious obstacle to the accomplishment of the mission with which we were charged. Not only did it substitute a hostile for a friendly vote; not only did it deprive the metallic cause of some of its ablest champions, but in view of the crisis in the affairs of the Latin Monetary Union, involved in the necessity imposed upon its members of deciding before January 1, 1879, whether the Union shall be dissolved the year after or shall be continued, the changed attitude of Belgium made the French Delegation solicitous that nothing should be done in the Conference which should drive any State into revolt.

While thus the two smaller Latin States appeared with views opposed to the object of the Conference,† France, the leading State of the Union, declared through her finance minister, the president of the Conference, that, in suspending the Coinage of Silver, she did not incline to the Single Gold Standard, but, on the contrary, she occupied a position in which

*"Silver is a metal of an inferior order, ill adapted to the needs of civilization, inconvenient for individuals, fit only for backward nations; a metal the value of which has been constantly depreciating for four centuries, and which, when it is maintained among civilized people in the rank of Legal Money, causes, in a certain degree, the emission of Paper Money. If in certain countries there were not already an unwarrantable circulation of Silver, the circulation of paper would not be so considerable." (Remarks of Mr. Feer-Herzog, third session.)

† "While France anticipates her return in practice to the Double Standard, in Switzerland and Belgium the hope is entertained that Silver, after a period of transition, during which it will have the force of Legal Tender for small sums only, will finally be reduced to the mere office of divisionary money." (Remarks of Mr. Feer-Herzog, third session.)

she might await the favorable moment to re-enter upon the system of the Double Standard.

Italy, the next State in population and wealth within the Union, occupied throughout the Conference the most advanced ground in defense of the bi-metallic system.†

The Kingdom of Greece, which in 1868 became a member of this Union, announced its full accession to the views of France, as expressed by the president of the Conference.

Austria-Hungary was hardly less pronounced than Italy in asserting the importance of maintaining the monetary functions of Silver, and committed itself unreservedly to the principle of the concurrent circulation of the two metals by virtue of laws establishing a ratio between them.‡

The Government of Russia, through its Delegate, announced its intention to reserve its decision upon the questions before the Conference until such time as it should be prepared to resume specie payments.

A disposition was manifested by some of the advocates of Gold-monometallism to make it matter of disparagement that the advocacy of Silver came so largely from States laboring under financial embarrassments and suffering the circulation of irredeemable Paper Money. The Delegation of the United States, however, refused to admit this as a valid objection. That States heavily burdened with debts, representing the cost of wars, of vast military establishments, and extensive public improvements, should earnestly protest against a financial policy which, by diminishing the stock of Gold and Silver in which debts may be discharged, must greatly enhance the weight of those obligations, and make taxation more oppressive, certainly affords no justification for reproach.

We conceive that there can hardly be dissent from the proposition that it would be both a political wrong and an economic injury of the gravest character to adopt a monetary policy which should increase the

* "In the French Chambers, at the time of the suspension of Silver Coinage, there were long and earnest debates concerning the meaning and effect of this measure. Was it a movement toward the Gold Standard or was it a provisional condition which would permit France to await the favorable moment for re-entering upon the Double Standard? The government made a full explanation on this point. It declared very categorically that we were not proceeding towards the Single Standard of Gold. We are, in its view, in a situation of expectancy, a situation which we shall not abandon, except for good reasons, when they present themselves, and then probably to return to the system of the Double Standard." (Remarks of Mr. Léon Say, third session.)

† "That as long as the French law was in operation only unimportant fluctuations arose in the relations of the two metals, whatever the production of the mines of the one or the other. * * * That if the French law alone attained this result, it becomes evident, *a fortiori*, that when there is a bi-metallic treaty between France, England, and the United States, the relation would be fixed with such solidity that it would become unshakable." (Resolutions offered by Count Rusconi, in behalf of the Italian Delegation, seventh session.)

‡ "In the opinion of this government, the depreciation of Silver is a fact eminently to be regretted; a calamity which it would wish, on its own account, it were possible to remove, because it is attached upon principle to the system of the Double Standard, and in theory can but subscribe to the proposition of the United States." (Remarks of Mr. Hengelmüller, third session.)

pressure of debts by diminishing the amount of the precious metals in which they may be paid. With the enormous public debts of Europe and America, amounting to not less than twenty thousand millions of dollars, contracted at a time when Silver formed an important part of the monetary circulation, the project to reduce that metal to the rank of Token Money, allowing it to remain in Europe and America only as the small change of retail trade, and banishing the residue of the accumulated stock to India and the East, is one which might well arouse the liveliest apprehensions of public disaster. So far from accepting it as a reproach that the States referred to gave a cordial support to the proposition of the United States, your Commissioners hold it to be a legitimate argument that the retention of Silver would greatly facilitate the resumption of specie payments* by all countries having a forced circulation of paper, a result primarily of great importance to themselves, and to be desired by the commonwealth of nations.

The position of Holland at the Conference was one of great interest. The senior member of the delegation, Mr. Vrolik, president of the Netherlands Society for the Promotion of Industry, was unavoidably absent; but at the last session he by telegraph authorized the presentation to the Conference of his address of July, 1876, to the King of Holland, recommending an International Monetary Conference, for the purpose of establishing the bi-metallic system throughout the civilized States.†

The remaining member of the Delegation, Mr. Mees, president of the Netherlands Bank, is a well-known economist, who in 1872 advocated the adoption of a Monetary Union between the nations of Western Europe, establishing the ratio between Gold and Silver of 1 to 15½. In consequence, however, of the action of Germany in rejecting the use of Silver and precipitating a large stock of it upon the mints of the neighboring States, Mr. Mees appeared at the Conference in opposition to Free Coinage, declaring that while England and Germany adhered to

* "Would it not be more difficult for Paper-Money countries to return to a metallic circulation if the single Gold Standard were adopted everywhere? It would be necessary for them to have recourse to the stock of Gold, already so greatly diminished, in order to undertake their payments in specie. Are we sure that the quantity of Gold actually in existence would suffice for the needs of circulation?" (Remarks of Mr. Goschen, third session.)

† "The changes which have taken place in the monetary legislation of various countries appear to us the principal cause of the depreciation of Silver, and at the same time this cause appears to be a permanent one. The cause of the evil being recognized, the remedy does not seem very difficult to find. If all the civilized States opened their mints to Silver, the same result would be observed which formerly was reached with reference to Gold, and the value of Silver would again enter upon an ascending course. It is, nevertheless, manifest that no isolated State would be willing to expose itself to the emergency of exporting Coins of higher value to be replaced by others more or less depreciated. This danger disappears the moment that all States, or at least a majority of States, come to an understanding to adopt the Double Standard, with a uniform relation between Gold and Silver; that of 1 to 15½ being in our view the most practicable ratio."

Gold-mono-metallism, Holland, standing between them, both geographically and financially, must conform to their action.

Under the explanation of the terms of the invitation given by the United States minister at London, Delegates had been appointed by the Government of Sweden and Norway, with instructions to refrain from participating in measures which might compromise in any way the mono-metallic position of those States.

The foregoing enumeration comprises all the States from which Delegates appeared at the Conference. The Empire of Germany was not represented. At the second session, the Conference, at the instance of the Italian Delegation, invited that government to participate in its deliberations. This invitation, having been communicated to the ambassador of Germany, was declined in terms which will appear in the accompanying documents.

The United States appeared at the Conference at a disadvantage by reason of the belief, quite commonly entertained in Europe, that the action of Congress had been mainly determined by the consideration that the United States are largely producers of Silver. This opinion exhibited not a little vitality, and your Commissioners found it necessary to combat it. They showed that not only has the Government of the United States no royalty on the production of the mines of the precious metals, but that, through the absence of any accumulated stock, it has in fact far less of a special interest in the question under consideration than many or even most of the States represented in the Conference; that the effect of a given decline in Silver had been, and would continue to be, a more serious loss to the accumulated wealth of France, Belgium, Holland, and especially Great Britain, through its Indian dominions, than to the United States; that as a branch of industry the production of Silver is but one of many occupations to which our available labor and capital have hitherto been inadequate; and that even as a debtor, the United States, a country of vast undeveloped resources, could better bear the weight which would be added to its debts by a diminution of the Money supply of the world, than could other States with less recuperative power and a narrower margin for future growth.

Your Commissioners have reason to think that these views, during the course of the Conference, prevailed over the opinion referred to respecting the motives which had actuated the United States in the recent legislation respecting Silver. They believe that the European Delegates came to fully recognize the preponderating motive of that legislation as springing from a general interest in an undiminished Money supply, and not from the wish to support a particular branch of American industry. We are glad to report that the allegation so erroneously made that the act of February 28, 1878, was passed as a measure of partial repudiation, and with the object of paying the debts of the United States in Money of inferior value, had made very little impression on the public mind of Europe, so far as could be judged from the tone of the Conference.

Such being the attitude of the nations represented at the Conference, so general the consent that Silver should not cease to be Money of full power in Europe and America, so almost universal the abandonment of the *propaganda* of Gold-mono-metallism, it seemed to the American Delegates, as it had to Congress in the enactment of the law under which the Conference was invited, that measures should be adopted to restore Silver to its rank as a Money Metal. An object of so much importance would justify some sacrifice, should it be found necessary, and the encountering of some risks, in a movement out of the false position into which the civilized world had been brought by the hasty political action of Germany. Your Commissioners did not fail to urge the adoption of a policy of courageous action. But this policy was not accepted, and whatever the causes which disinclined some of the countries most firmly adhering to the principle of a bi-metallic circulation to accept it, it was apparent that the two following were especially influential in preventing action at the present time. The first was the existence of the German stock of Silver still remaining, and now estimated by high authority at about $75,000,000.* Mr. Feer-Herzog, the distinguished Delegate from Switzerland, was disposed to deny to the German stock any considerable influence upon the general market of Silver; but the Delegations from England and France were agreed in attributing to it great importance in its bearing on the price of Silver, and on the practicability of a resumption of free Coinage by the bi-metallic States. Mr. Gibbs, former governor of the Bank of England, declared the influence of the German stock upon the Silver market to be very serious.† In his view, in which the French Delegates substantially concurred, this body of Silver hung like an avalanche over the market, and exerted a permanently depressing influence upon the price of that metal. The existence of this large accumulation in a single hand, subject to instantaneous control, would also, in the opinion of the same authorities, render exceedingly dangerous the resumption of Silver Coinage, inasmuch as the whole mass of it

* See page 729.

† "The German stock was not like Silver in the bowels of the earth, to be extracted at the cost of certain labor and capital, but was a definite quantity held by the sellers, who could sell whenever they chose. It was a weight thrown into the balance, necessarily deranging the equilibrium between Gold and Silver. An abnormal quantity, whether large or small, beyond ordinary production and consumption, must always depress the market. The portion of German Silver already sold had lowered the price, and the portion unsold was the cause of the continued fall. It could not be compared with the total production of the world, but only with the surplus which each State had to sell after satisfying its own wants, and the German stock was very large in proportion to this. Until that stock was exhausted it would be impossible to predict what the value of Silver would be." (Remarks of Mr. Gibbs, fourth session.)

"From a commercial point of view the existence of this mass of coined Silver, which is there all ready, of which man is already master, which he holds under his hand, and can let go or hold back as he wishes, according to the course of events, exercises an influence far more decisive than that of a mass of Silver which is not produced, and which does not arrive in the Money-market except gradually—a little at a time." (Remarks of Mr. Léon Say, third session.)

might be precipitated upon the mints of the bi-metallic countries, with the probable result of breaking down their system at an early date, and also of enabling Germany to dispose of its stock upon advantageous terms—a feature which did not seem to be contemplated with satisfaction by any considerable portion of the Conference.

The second cause which was largely influential in producing the conviction that present action for resuming the general use of Silver was inexpedient was found in the wide divergence between the market rate of Silver and the mint rate generally prevailing in countries having a bi-metallic system. With Gold ruling at 17.50 to 17.75 in terms of Silver, it was held by the majority of the Conference to be unsafe to coin Silver at 1 to 15.5, or any other ratio near to that. In view of a divergence so wide, it was thought impossible to bring the market ratio up to the legal ratio merely by opening the mints to Silver. It was indeed admitted, as expressed by Mr. Goschen, that the position involved a "vicious circle, States being afraid of employing Silver on account of the depreciation, and the depreciation continuing because States refused to employ it." (Remarks of Mr. Goschen, third session.) But from the joint effect of these two causes, it was the disposition of the European Delegates, even of those most favorable to the restoration of Silver to its proper monetary function, to observe events and await the melting away of the mass of German Silver,* and a fortunate turn in the quotations of Silver, due to a diminution of the supply, or to the continued effect of the East Indian demand.

In answer to these views, presented by men to whose judgment great respect was due, the Delegates of the United States urged, first, that a policy of expectancy is in danger of passing into a policy of endurance; secondly, that in the present situation there was a temptation to individual States like Belgium, Holland, or France, having considerable supplies of Silver, to anticipate each other's action and dispose of their stock, more or less suddenly or surreptitiously, which course, should it be resorted to by a single State, might inaugurate a panic and depress Silver to a point which would involve incalculable disasters.†

The interests involved in the retention of this metal being, then, so great, and the danger from delay so manifest, it was urged that something should be done at once, and that the necessary cost and risk of an effort to restore it to the rank of which it has been deprived by the po-

* "The attitude of the French Government is an expectant one, and it must remain so long as the cause of the fall of Silver shall not have been accurately recognized and measured, and, notably, until Germany shall have ceased to dispose of its stock of that metal. * * * Perhaps this will have taken place within two or three years from now, but still it is the dark side of the question, which, at the present moment, deprives France of her freedom of movement." (Remarks of Mr. Léon Say, third session.)

† "If other States were to carry on a *propaganda* in favor of a Gold Standard and the demonetization of Silver, the Indian Government would be obliged to reconsider its position, and might be forced by events to take measures similar to those taken elsewhere. In that case a scramble to get rid of Silver might provoke one of the greatest crises ever undergone by commerce." (Mr. Goschen's remarks, third session.)

litical action of Germany and the closing of the mints of the Latin Union should be unhesitatingly incurred by the nations interested. If, according to the views previously expressed, the German stock were, indeed, so important a factor in the financial problem, the provisional accumulation of Silver bullion in public treasuries, in definite proportions as should be agreed upon among the States consenting, might be made the means of absorbing this mass, without encountering the risks apprehended from Coinage. This would involve a certain definite expense and a temporary loss of interest on the amount so held, but these should be regarded as trivial in comparison with the advantages which might be expected to result, or with the possible mischief of a failure of the attempt to carry on Coinage. When it is considered into how vast a body of commercial transactions disorder has been introduced by the destruction of what is termed the "normal price" of Silver, and consequently of a par of exchange between the Gold countries and the Silver countries, the neutralization of the German stock,* which otherwise might appear formidable, would be seen to be the part of common prudence.

Your Commissioners trust that an examination of the journal of the Conference will show that they urged the adoption of a policy of action, and proposed, on behalf of the United States, liberal contribution and co-operation in the work of re-establishing Silver in its function as Money.

The causes which have been referred to, however, proved sufficient to prevent concurrent action at this time.

An unfortunate feature of the situation was found in the existence of irredeemable Paper Money in three of the countries seemingly most deeply interested in maintaining the monetary *rôle* of Silver. This fact, if it did not diminish the moral authority with which the Delegations of those countries could enter into such a Conference, would at least greatly impair the practical value of any co-operation they might proffer.

In speaking of the obstacles which prevented an agreement as to the resumption of Silver Coinage, or the establishment of a legal ratio in the Coinage between Gold and Silver, your Commissioners do not desire to be understood that all the Delegates who have been mentioned as showing themselves favorable to the continued use of Silver as Money admitted the practicability of a concurrent circulation of the two metals in the same country, or professed a willingness to recommend to their governments action to that end. The English Delegation, while strongly deprecating the crusade against Silver, nevertheless declared that England would not recede from the monetary legislation of 1816 establishing the Single Gold Standard. At the same time they claimed that England

* "If this same sum were in the United States Treasury, in place of an equal amount of Gold, the aggregate stock of Silver would be unaltered, but this £15,000,000 would no longer weigh upon the market, and Silver might be restored to a normal position." (Remarks of Mr. Goschen, 3d session.)

had done more for Silver than any other power* by refusing to limit the Rupee Coinage in India, and submitting to all the losses, both to trade and to government revenue, resulting from the depreciation of Silver. The remarks we have made above refer, therefore, only to those countries which stood committed, more or less fully, to the concurrent use of the two metals, but deemed themselves precluded by the considerations detailed from undertaking at the present juncture any practical measures for the full restoration of Silver.

As it was, early in the course of the proceedings, shown to be impossible, under the complications existing, to secure an agreement for giving circulation to Silver as Money of full power, your Commissioners assented to the views of leading members, afterward embodied in the response made to the propositions of the American Delegates, that it was useless to discuss the particular ratio—whether 1 to 15.5, 1 to 16, or some other—which should be adopted were a Monetary Union to be formed. Your Commissioners were unanimous in believing that any particular ratio, without provision for actual Coinage thereupon, would be futile; while with provision for Coinage, creating a demand for the metal, any one of many ratios within reasonable limits of choice might be upheld, to the benefit of the industrial and commercial world.

With these references to the positions of the several States represented, and to the views expressed by individual Delegates, we proceed to recite the formal action of the Conference upon the questions before it.

At the second session, on the 16th of August, the Commissioners of the United States submitted the two following propositions:

I.

It is the opinion of this Assembly that it is not to be desired that Silver should be excluded from Free Coinage in Europe and the United States of America. On the contrary, the Assembly believes that it is desirable that the Unrestricted Coinage of Silver, and its use as Money of Unlimited Legal Tender, should be retained where they exist, and, as far as practicable, restored where they have ceased to exist.

II.

The use of both Gold and Silver as Unlimited Legal-Tender Money may be safely adopted:

First. By equalizing them at a relation to be fixed by international agreement; and

Secondly. By granting to each metal, at the relation fixed, equal terms of Coinage, making no discrimination between them.

* "Though England had a Gold Standard, she had great interest in the maintenance of Silver as Currency. She had, moreover, a more definite and less compromised position for the discussion of this question than other countries, for she had borne the depreciation of Silver in India without trying to shut her doors upon it. She had done more than any other country to maintain Silver. The Latin Union had shut their doors against Silver. Holland had half shut hers; but while others, afraid of a further depreciation, had taken definite and restrictive measures, England had allowed Silver to take its natural course, and for five years had borne the burdens resulting therefrom. The Indian government had suffered a great loss; the merchants had suffered from fluctuations in value, and public functionaries had suffered from the depreciation, but England had given proof of her faith in regard to Silver by waiting to see whether it would not recover its former value." (Remarks of Mr. Goschen, third session.)

The following third proposition was prepared and held in reserve, awaiting the development of the views of the Conference:

III.

The Delegations here present agree to recommend to their respective governments, that, by the Free Coinage of Silver at a relation to be agreed upon, or, provisionally, through extended Coinage upon government account and the accumulation of Silver bullion in public treasuries, they make a concerted effort to restore Silver to its function as Money of full power.

At no time during the further proceedings did the interests of our mission appear to require the presentation of this proposition.

At the seventh and concluding session, on the 29th of August, the following reply to the propositions submitted by the Delegates of the United States was offered on behalf of the majority of the European Delegates:

The Delegates of the European States represented in the Conference wish to express their sincere thanks to the Government of the United States of America for having procured an international exchange of opinion upon a subject of so much importance as the Monetary Question.

Having maturely considered the proposals of the representatives of the United States, they recognize:

I.

That it is necessary to maintain in the world the monetary functions of Silver as well as those of Gold, but that the selection for use of one or the other of the two metals, or of both, simultaneously, should be governed by the special position of each State or group of States.

II.

That the question of the restriction of the Coinage of Silver should equally be left to the discretion of each State or group of States, according to the particular circumstances in which they may find themselves placed, and the more so, in that the disturbance produced during the recent years in the Silver market has variously affected the monetary situation of the several countries.

III.

That the differences of opinion which have appeared, and the fact that even some of the States which have the Double Standard find it impossible to enter into a mutual engagement with regard to the free Coinage of Silver, exclude the discussion of the adoption of a common ratio between the two metals.

Contemporaneously with the presentation of this paper, individual expressions of opinion were offered by several of the Delegations, which may be seen in the journal accompanying this report.*

*1. The view taken by the Austrian Delegation of the true sense and purport of the declaration was thus stated by the chairman, Count Kuefstein:

"In consequence of the divergences of opinion which have appeared in the course of this discussion, this formula can be nothing but a compromise embodying the last concessions which the partisans of the Single Gold Standard have been able to make, and at the same time permitting those who desire to see the American propositions succeed not to abandon their own point of view. * * * In presence of the explanations which have been given, from which it might be inferred that the declaration implied a recognition of the impossibility of an international agreement, Count

To this declaration of the European Delegates, the Delegates of the United States rejoined with the following statement of their views, with which the formal proceedings of the Conference terminated:

In response to the address of the representatives of the European States, the representatives of the United States desire, on their part, to express their thanks to the European States for accepting their invitation and consulting with them upon a subject of so much importance.

The representatives of the United States regret that they cannot entirely concur in all that has been submitted to them by a majority of the representatives of the European States.

They fully concur in a part of the first proposition, viz, that "it is necessary to maintain in the world the monetary functions of Silver as well as those of Gold," and they desire that ere long there may be adequate co-operation to obtain that result.

They cannot object to the statement that "the selection for use of one or the other of these two metals, or of both simultaneously, should be governed by the special position of each State"; but if it be necessary to maintain the monetary functions of the two metals as previously declared, they respectfully submit that special positions of States may become of secondary importance.

From so much of the second proposition as assigns as a special reason for at present restricting the Coinage of Silver "that the disturbance produced during the recent years in the Silver market has differently affected the monetary situation of the several countries," they respectfully dissent, believing that a policy of action would remove the disturbance that produced these inequalities.

In regard to the third and last proposition, they admit that "some of the States which have the Double Standard," or, as they prefer to say, use both metals, "find it impossible to enter into a mutual engagement for the free Coinage of Silver."

They, as representatives of the United States, have come here expressly to enter into such an engagement. The difficulty is not with them, and, wherever it may be, they trust it may be soon removed. They entirely concur in the conclusion drawn from this state of the case that it "excludes the discussion of the adoption of a common ratio between the two metals if the nations are not ready to adopt a policy to uphold it. We remain upon ours; the European States upon theirs."

R. E. FENTON.
W. S. GROESBECK.
FRANCIS A. WALKER.
S. DANA HORTON.

In closing this Report it may be proper to add that your Commissioners have been subjected to considerable delay since the adjournment of the Conference, from causes beyond their control. Although we have given daily attention, the work in the hands of the Secretaries is not yet fully perfected, owing to the double translations, and the correction and printing of the remarks of Delegates after the final adjournment, together with the enlargement of the numerous exhibits. Such progress has been

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Kuefstein feels obliged to declare, on his part, that if he adheres to the formula proposed, it is precisely because, in his view, it does not exclude the possibility of such an arrangement."

2. The Italian Delegation offered the following:

"In adopting the formula proposed, the Conference does not reply to the questions which have been proposed to it, and, avoiding systematically to make a clear utterance upon the possibility or impossibility of a fixed relation to be established by international convention between Gold and Silver, it leaves its task unfinished."

made, however, as to enable us to consult the records for all practical purposes in the preparation of our Report. It will not be understood that we complain of the causes of delay, but refer to them as showing the deliberation incident to duties of this nature.

Very respectfully,

R. E. FENTON.
W. S. GROESBECK.
FRANCIS A. WALKER.

S. D. HORTON, *Secretary.*
PARIS, *October* 17, 1878.

APPENDIX.

CORRESPONDENCE PRESENTED BY MR. FENTON.

I.

ON THE BANKING SYSTEMS IN EUROPE.

HOTEL MEURICE, PARIS, *October* 1, 1878.

DEAR SIR: The representatives of the United States at the recent International Monetary Conference held in this city, desire to obtain information relative to the establishment and monetary operations of the Bank of ———, and to this end I venture to address you. Allow me to inquire—

1st. As to the constitution and functions of the bank, embracing its relations to the Government and people.

2d. As to the extent and character of its operations.

3d. As to the amount of its paper issue.

4th. As to the amount of Gold Coin held and required to be held.

5th. As to the amount of Silver Coin held and required to be held.

My inquiries may lead too far, or may be too indefinite, but a brief statement or summary of the duties and operations of the bank, its relation to the Government and the citizen, embracing for a year or more the amount and character of business, including amount of paper and coin, is especially desired.

An early reply will be thankfully appreciated, as it will enable myself and associates to embody in our report information of interest and value to our Government and people.

Very respectfully, yours,

R. E. FENTON, *Chairman.*

The letter, of which the foregoing is a copy, was addressed to Mr. W. C. Mees, President Bank of Netherlands, Amsterdam; Prof. Emile de Laveleye, Liege, Belgium; Henry H. Gibbs, Esq., Deputy-Governor Bank of England, London; Mr. Eudore Pirmez, Ex-Minister and member of the House of Representatives, Belgium, and member of the International Monetary Conference at Brussels; and to Hon. E. F. Noyes, Minister, &c., Paris, and Hon. Bayard Taylor Minister, &c., Berlin.

A.—FRANCE.

LEGATION OF THE UNITED STATES,
Paris, November 15, 1878.

GOV. R. E. FENTON:

DEAR SIR: I have the honor to transmit to you herewith a brief and condensed report upon the character, management, resources, and operations of the Bank of France, prepared at my request by Mr. Henry Vignaud, Second Secretary of this Legation. Accompanying this report are certain printed documents, kindly furnished by Mr. Léon Say, French Minister of Finances.

It is hoped the information thus furnished may be useful to you.

I am, very respectfully, your obedient servant,

EDWARD F. NOYES.

LEGATION OF THE UNITED STATES,
Paris, November 14, 1878.

Hon. E. F. NOYES,
Envoy Extraordinary and
Minister Plenipotentiary of the United States, Paris:

SIR: In answer to the inquiries in relation to the Bank of France made to this legation by Mr. Fenton, chairman of the United States Delegation at the Monetary Conference held in this city, which were referred to me, I have the honor to submit the following report.

I will state in the order as proposed the questions upon which Mr. Fenton required information:

1st. AS TO THE CONSTITUTION AND FUNCTIONS OF THE BANK, EMBRACING ITS RELATIONS TO THE GOVERNMENT AND PEOPLE.

The bank is a chartered company of stockholders. Its capital, which was at the outset forty-five millions of francs, is now one hundred and eighty-two millions ($36,400,000). Its charter, which has been renewed three or four times, extends now to 1897, and gives it different banking privileges and the *sole* authority for issuing paper money. It has seventy-eight branches. Its shares are held by 23,261 persons. The dividend paid in 1877 on each share was ninety-five francs ($19).

The officers of the bank are:

One governor and two sub-governors, appointed by the State; fifteen regents and four censors, elected by the stockholders.

The bank receives the deposits of the Government and allows no interest on such deposits.

It makes advances to the Government on its treasury and mint bonds. It has acted in the past, and in many instances, as a disbursing agent of the Government.

2d. AS TO THE EXTENT AND CHARACTER OF ITS OPERATIONS.

a.—Character of the operations.

1°. To discount bills of exchange at three months' date, which are secured by three, and in some instances by only two, signatures.

2°. To make advances on French public securities, on railroad stock, on bonds of the City of Paris, on deposits of Bullion, etc.

3°. To issue paper money and promissory notes, payable and transferable to order.

4°. To receive in account coin, currency, and bills of exchange.

5°. To receive for safe-keeping bonds, diamonds, and public securities, and to cash the interest on securities when payable in Paris.

b.—Extent of the operations.

Total amount of operations.

In 1876	$1,833,366,780
In 1877	1,802,116,600

Bills of exchange, mint and treasury bonds discounted.

In 1876	$1,472,400,480
In 1877	1,515,563,580

Rate of discount.

In 1876	3%
Since April, 1877	2%

Notes made payable at Bank of France and cashed for its clients.

In 1876	$282,171,580
In 1877	280,112,660

Notes collected at domicile by the bank for its clients, and without cost.

In 1877	$1,067,550,946

3d. AS TO THE AMOUNT OF ITS PAPER ISSUE.

There is no limit to its paper issue. During the late war it was limited by exception and given forced circulation. This provision expired January 1, 1878.

Maximum paper circulation.

In 1877	$545,043,480
Maximum circulation same year	471,576,620
Circulation on January 1, 1878	502,505,950

4th. AS TO THE AMOUNT OF GOLD COIN HELD AND REQUIRED TO BE HELD.

5th. AS TO THE AMOUNT OF SILVER HELD AND REQUIRED TO BE HELD.

a.—Gold and Silver Coin held.

To answer this part of the fourth and fifth queries I submit the tabular statement which was prepared from official material furnished to this legation by Mr. Leon Say. It shows the maximum and minimum

amount of Gold and Silver Coin held by the bank for each year of the period extending from 1868 to 1878. The largest amount of Silver held by the bank is that which it holds now, namely, $202,500,000.

b.—Amount of Gold and Silver required to be held.

The answer to this part of the question is negative. The bank is not required to have any specified amount of Coin in its vaults. This is entirely left to the discretion of its managers, the only safeguard being found in their integrity and business capacity.

Hoping that this information will satisfy Mr. Fenton, I have the honor to be, your respectful and obedient servant,

HENRY VIGNAUD,
Assistant Secretary.

Coin held by the Bank of France at the following dates:

Years.	Date.	Gold.	Silver.	Amounts.
1868—Maximum	Sept. 3	$175, 040, 000	$87, 820, 000	$262, 860, 000
Minimum	Jan. 3	132, 960, 000	62, 500, 000	195, 460, 000
1869—Maximum	Dec. 23	141, 000, 000	112, 360, 000	253, 360, 000
Minimum	Jan. 18	118, 040, 000	94, 860, 000	212, 900, 000
1870—Maximum	June 23	147, 860, 000	115, 840, 000	263, 700, 000
Minimum	Dec. 24	86, 880, 000	14, 180, 000	101, 060, 000
1871—Maximum	Aug. 25	118, 520, 000	19, 780, 000	138, 300, 000
Minimum	Feb. 23	72, 280, 000	7, 420, 000	79, 700, 000
1872—Maximum	Dec. 4	131, 220, 000	27, 380, 000	158, 600, 000
Minimum	Jan. 13	110, 420, 000	15, 760, 000	126, 180, 000
1873—Maximum	June 5	138, 240, 000	25, 920, 000	164, 160, 000
Minimum	Aug. 22	112, 040, 000	29, 100, 000	141, 140, 000
1874—Maximum	Dec. 24	202, 840, 000	63, 360, 000	266, 200, 000
Minimum	Dec. (1873) 26	121, 920, 000	30, 080, 000	152, 000, 000
1875—Maximum	Dec. 24	232, 840, 000	100, 860, 000	333, 700, 000
Minimum	Jan. 12	201, 420, 000	61, 840, 000	263, 260, 000
1876—Maximum	Dec. 23	308, 680, 000	127, 900, 000	436, 580, 000
Minimum	Dec. (1875) 27	230, 080, 000	101, 340, 000	334, 420, 000
1877—Maximum	June 4	297, 620, 000	158, 640, 000	456, 260, 000
Minimum	Dec. 22	241, 020, 000	172, 940, 000	413, 960, 000
1878	Oct. 5	226, 700, 000	202, 500, 000	429, 200, 000

Banque de France, Lois et Statuts. Assemblée Générale des Actionnaires, Compte Rendu et Rapport des Censeurs, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878. [Deposited in the Library of the State Department, Washington.]

B.—GERMANY.

AMERICAN LEGATION, 67 BEHRENSTRASSE,
Berlin, October 18, 1878.

Hon. R. E. FENTON:

MY DEAR SIR: Mr. Chapman Coleman, second secretary of the legation here, brings you, with this, such material as we have been able to collect concerning the German Imperial Bank.

Mr. Coleman himself has given considerable time and labor to the

work, as the information does not exist in a compact form, but must be obtained through a variety of sources. I trust, however, that it will be sufficient for your purpose.

Very truly, yours,

BAYARD TAYLOR.

LEGATION OF THE UNITED STATES,
Berlin, October 18, 1878.

SIR: Pursuant to your instructions I have prepared, and respectfully submit, in response to the inquiries of the Hon. R. E. Fenton, chairman of the American representatives at the late Monetary Conference at Paris, a report on the establishment, functions, privileges, duties, and business of the German Reichsbank, at least in its chief and characteristic features, as called for by that gentleman; referring for more minute information to the accompanying volume, entitled German Bank Constitution, which contains the law on the subject, and also the accompanying latest annual report of the bank.

The establishment of the German Reichsbank (Imperial Bank) is authorized by the general Imperial Bank Law of March 14, 1875, of which sections 12 to 41 inclusive treat exclusively of the *Reichsbank*. A promulgation by the Emperor and Federal Council, conjointly issued in accordance with the provisions of section 40 of the law, on May 24, 1875, entitled "Statute of the Reichsbank," and also contained in the volume referred to, defines more closely the forms and the rules under and by which its business shall be conducted, and fixes the 1st of January, 1876, as the day on which its operation shall begin.

The law provides that a bank, to be entitled the Reichsbank, subject to the supervision and conduct of the Imperial Government, and having a corporate capacity, shall be established for the purpose of regulating the Money circulation throughout the entire Empire, and of facilitating the balancing of payments and the useful employment of available capital.

The chief bank is to be located at Berlin; branch establishments may be located elsewhere throughout the Empire.

The bank is entitled to purchase Gold and Silver in bars and coins, also bills falling due within three months, with, as a rule, three, and at least two, indorsements, known to be good; further, to discount, buy, or sell obligations of the Empire, of a German State, or of German municipal corporations due at their nominal value within three months; to make loans for a period not longer than three months on certain kinds of enumerated personal property and values; to make collections and payments for persons, corporations, &c., after due security shall have been furnished; to purchase and sell under like conditions as to security all kinds of values; to accept deposits of money at and without interest, the amount of the deposits at interest not to exceed, however, that of the capital stock and reserve fund; to receive for safekeeping and management objects of value, &c., &c., &c.

The bank is required to exchange Gold bars for its notes at 1,392 marks to the pound fine, the seller paying the expenses of the assay. The rate at which it discounts or makes loans on interest must be published from time to time.

The bank may emit as large an amount of notes as its business requires. The execution, emission, and destruction of the same takes place under the control of the Imperial debt commission, to which an additional member is appointed by the Emperor for the purpose.

The Reichsbank is required to hold at least one-third of the amount of its Note circulation in current German Money. Imperial Treasury Notes, Gold bars (1,392 marks to the pound fine), or foreign coins, the remainder in Gold bills maturing at not later than three months, and with generally three, and not less than two, good indorsements. By current German Money is understood the new Imperial Gold and Silver Coins (the latter a legal tender to the amount of 100 marks), and, for the present, the thaler pieces of the old currency, a Silver Coin rated at 3 marks, and a legal tender to any amount. These thalers are ultimately to be called in and replaced by the new currency in an amount to be fixed when the amount of the thaler pieces, estimated roundly at 100,000,000, shall have been determined by an investigation now pending.

The amount of metal (current German Coin, Imperial Treasury Notes, Gold bars, and foreign coins) actually held has heretofore in general amounted not to a third only, as required, but to from 70 to 80 per cent. of the total Note emission of the Reichsbank.

The entire emission of unsecured notes of all the banks provided for by the law is fixed at 380 million marks, 250 millions of this amount being allotted to the Reichsbank.

When other banks lose their right of Note emission, the amount lost accrues to the Reichsbank, which, in consequence of such accretion, is now entitled to an unsecured Note issue of about 283 million marks. If this amount is exceeded, the Reichsbank, like every other bank, becomes liable to a State tax of 5 per cent. on the excess.

The bank is required to redeem its Notes whenever presented in current German Coin. It is exempt from State taxation throughout the entire Empire, subject to the above-mentioned qualification. On failure to repay its loans, the bank is entitled to dispose summarily of the securities. The bank must make payments for the Empire to the extent of its credit, free of charge, and may do so for the individual States composing the Empire.

The capital stock of the Reichsbank is 120 million marks, consisting of forty thousand shares of three thousand marks each, made out in the name of the holder. The shareholders are not personally liable for the obligations of the bank.

The following disposition is made of the profits at the conclusion of the year: To the shareholders, a regular dividend of 4½ per cent. on the stock capital; of the surplus, 20 per cent. to the reserve fund, provided such percentage does not amount to a fourth of the stock capital; the

surplus still remaining accrues to the shareholders and the Imperial Treasury, a moiety to each, provided the gross amount of dividends to the shareholders does not exceed 8 per cent.; of the surplus that may yet remain, ¼ to the shareholders and ¾ to the Imperial Treasury. If the profits do not amount to 4½ per cent. of the capital stock, the insufficiency is made good out of the reserve fund.

The shareholders participate in the management of the bank. For particulars as to their participation and that of the Government, as to the government of the bank in general, the right of the Government to acquire or wind it up after a notice of one year for the first time on January 1, 1891, and thereafter at stated times, and for the particulars and conditions of such acquisition or disestablishment, the law itself is referred to.

The amounts of Gold and Silver, respectively, actually held by the bank are not known outside of the bank, as the exhibits published weekly and the reports submitted annually at the general meeting of shareholders do not distinguish between the two metals, but give only the gross amount of both.

The entire business of the Reichsbank (its branch establishments included) amounted for the year 1875 to 17,458,067,000 marks; for the year 1876, to 36,684,830,600 marks; for the year 1877, to 47,541,619,800 marks. The profits for the year 1877 amounted to 10,770,229.98, of which, after deducting the ordinary dividend of 4½ per cent. on the capital stock for the shareholders, there accrues to the reserve fund 1,074,046 marks, and to the Imperial Treasury and the shareholders 4,296,183.98 marks, a moiety to each. The balance-sheet of the bank for the 31st of December, 1877, shows that of the entire volume of Notes printed for circulation, 2,047,664,597.50 marks, there were outstanding only 815,534,992.50 marks, secured by metal in the amount of 493,981,-311.96 marks, being about 60 per cent. of outstanding notes, and therefore much more than the security required by law.

Hoping the information above given may answer the purposes for which it was desired,

I have the honor to be, sir, your obedient servant,

CHAPMAN COLEMAN,
Second Secretary of Legation.

Hon. BAYARD TAYLOR,
Envoy Extraordinary and Minister Plenipotentiary of the United States at Berlin.

No. 1.—Verwaltungs-Bericht der Reichsbank. Für das Jahr 1877. Br. in 4to. Berlin. No. 2.—Deutsche Bankverfassung. I. Gesetze über die Ausgabe von Banknoten. II. Bankgesetz. III. Statut der Reichsbank. Mit Erläuterungen versehen von Dr. Adolf Soetbeer. Br. in 4to. Erlangen, 1875. [Deposited in the Library of the State Department, at Washington.]

C.—ENGLAND.

BANK OF ENGLAND, E. C.,
October 2, 1878.

R. E. FENTON, Esq.,
Hôtel Meurice, Paris:

SIR: I am desired by Mr. Gibbs to acknowledge the receipt of your letter of yesterday's date, in which you ask for information on certain points connected with the Bank of England.

Following your questions in their order, it may be stated:

1st. That the bank was founded by a charter granted in 1694, and renewed from time to time, and has a capital which, raised also at various times, now stands at £14,553,000. This is held by a large number of individual proprietors. Its relations to the Government are simply those of an ordinary banker. It keeps the Government accounts, makes temporary advances to the Government in such cases as the Government is authorized by Parliament to borrow, and carries out the work involved in the management of the public debt, the charge for this last duty being regulated by act of Parliament.

It is also a bank of issue, its duties and powers in this respect being strictly defined by the act of 1844 (of which a copy is inclosed). By this act the issue department is separated wholly from the banking department, and all Notes beyond a limit, which now stands at £15,000,000 (to which amount they are issued on securities), can only be issued on a like amount of Gold held expressly against them. A portion of the security held for the Notes up to £15,000,000 consists of a debt of £11,000,000 resulting from loans made in past times by the bank to the Government.

As a "bank," the Bank of England offers to the public the usual facilities of an ordinary bank.

2d. The extent and character of its operations will be best shown by the accompanying Parliamentary paper, which embraces the bank operations for the year 1877.

3d. Its paper issue is strictly limited, as above stated. The amount so issued last year will be shown in the return.

4th, 5th. The amount of Gold and Silver Coin on hand is a matter for its own discretion.

Whilst I have endeavored to state very shortly the direct answers to your questions, it will be obvious to you that there is very much left unstated which would be necessary to give a complete account of the bank. This could only be gathered from works specially bearing on the subject, amongst which may be mentioned the article in McCulloch's Commercial Dictionary.

For a more general account of the bank's operations and more detail as to its management, I am desired to forward you a small volume writ-

ten by Mr. Thomson Hankey, a director and a former governor of the bank. From this it is probable that you will be able to obtain sufficient information for your purpose. At the same time I need scarcely say that, if there should be any point on which you desire further knowledge, I am desired by Mr. Gibbs to say that every assistance shall be most readily afforded you.

I am, sir, your obedient servant,

HAMMOND CHUBB,
Secretary.

CAP. XXXII.—AN ACT to regulate the issue of bank notes, and for giving to the governor and company of the Bank of England certain privileges for a limited period.—[19th July, 1844.]

BANK OF ENGLAND.—*Returns "of the amount of bank-notes of the Bank of England held by the public, and of bank-notes of the Bank of England and coin held in reserve by the Bank of England."*

"Of the total amount of bullion;

"Of the minimum rate of interest charged by the Bank of England;

"And of the total amount of deposits, including the balances on account of the exchequer, and the balances held on account of the London bankers on the last day of each week, from the 1st day of January, 1877, to the 31st day of December, 1877 (in continuation of Parliamentary Paper No. 227, of session 1877)."

Ordered, by the House of Commons, to be printed May 16, 1878.

[Deposited in the Library of the State Department in Washington.]

D.—HOLLAND.

AMSTERDAM, 4 *October*, 1878.

Mr. R. E. FENTON, *Paris:*

DEAR SIR: I think I cannot answer more satisfactorily and speedily the questions contained in your letter of the 1st than by sending you—

1. The statutes of the bank translated in French.

2. Publications of the *Direction générale de Statistique du Royaume d'Italie*, containing the very accurate answers of Mr. Buest, one of the agents of the bank, to a questionnaire concerning the bank.

I adjoin a sheet, as we are about to distribute weekly to the commissaries of the bank, indicating the present state of the bank.

Very respectfully, yours,

W. C. MEES.

[Translated from the Dutch.]

Abridged balance-sheet of the Bank of the Netherlands of the 30th September, 1878, in the evening.

(Made in pursuance of Art. 21 of the Law of 22 December, 1863 (Stbl. No. 148), and the Royal Decree of 21 February, 1875, No. 4.)

Advances on—Discounts	f70, 856, 277 28	Capital	f16, 000, 000 —
Advances on—Stocks 48,077,490		Reserve fund	4, 273, 233 75
Advances on—Merchandises 7,329,130	55, 406, 620 —	Notes in circulation	180, 673, 145 —
		Deposits	43. 560, 045 80
COINAGE AND BULLION.		Sundry accounts	2, 213, 827 19
Coin.—Gold 37,348,630 / 71,306,460 69	108,655,090 69		
Coin.—Silver 7,125,746 44			
	115, 780, 837 13		
Stocks belonging to reserve fund	4, 273, 030 —		
Building and furniture	300, 000 —		
Sundry accounts	103, 487 33		
	f246, 720, 251 75		f246, 720, 251 75

Rates of interest:

Discount-bill of exchange	3½	p. ct. since 2 May, 1878
Promissory notes	4	" " " " " "
Advances on nature stocks, etc.	3½	" " " " " "
Advances on foreign stocks, etc.	4½	" " " " " "
" on merchandise	3½	" " " " " "

The Direction of the Netherlands Bank.

W. C. MEES,
President.
H. P. G. QUACK,
Secretary.

No. 5.—Banque des Pays-Bas. Loi et statuts. Br. in 8vo.

No. 6.—Statistique internationale des banques d'émission Pays-Bas. 1 Br. in 4to. Rome, 1878.

[Deposited in the Library of the State Department in Washington.]

E.—BELGIUM.

[Translation.]

PARIS, *September* 5, 1878.

Mr. CHAIRMAN: Not having my papers and my books here, I am forced to reply very briefly to the questions which you have done me the honor to address me.

In Belgium, any private individual or association, the responsibility of which is not limited, can issue bank-notes.

But only two joint-stock companies enjoy the same right: The Bank of Liège, to the extent of 5 millions, and the National Bank, in conformity with its statutes, which you will find in the volume herewith sent.

It may be estimated that the circulation of notes is about 300 millions fr., with a reserve of 100 millions fr.

At this time the metallic reserve is composed of—

Gold	60,000,000
Silver	22,000,000
Fractional Coin	14,000,000
	96,000,000

I am of opinion that the monetary circulation in Belgium ought to be at least equal to that of France; that is to say, 160 to 180 francs a head for 5,200,000 inhabitants.

It is supposed that in the country districts, in the manufacturing centers, and in all small trade, at least two-thirds of the payments are made in Silver.

At least half, say about 450,000,000, of the Coin must be in Silver.

I regret that my answers are so far from complete; but if you desire other details, I shall be happy to send them from Belgium at your first request.

Receive, etc., etc.,

ÉMILE DE LAVELEYE.

[Translation.]

PARIS, *September* 12, 1878.

I take the first opportunity to send to Mr. Fenton the statement which he asks, and shall be very happy if I can respond to his request.

I have sent to Brussels for the pamphlet which contains the bank statute and the constitution and by-laws, etc., of the bank. My note herewith sent is a very brief summary.

I shall also receive the last statement of the business of the bank, in that it will be easy to obtain such figures as may appear interesting, and which I have naturally been unable to give from memory.

Receive, etc., etc.,

EUDORE PIRMEZ.

[Translation.]

The National Bank of Belgium was established in 1850 for the period of 25 years, and was rechartered in 1873 for a new period of 30 years.

The National Bank is a joint-stock company, the stock belonging to private individuals who can dispose of it freely as they please. Its capital is fifty millions francs. It is administered by a board of directors composed of a governor nominated by the King, and of six directors chosen by the stockholders.

The governor has the right to veto the decisions of the board.

The governor exercises his superintendence by means of a commissioner who is present at each meeting of the board, and who has the right to know about all the business of the bank.

The stockholders nominate seven examiners, who control the administration, and who, in conjunction with the board, form the general council of the bank.

The National Bank is authorized to issue bank-notes; that power is for it a privilege, as it can only be granted to a stock company by a

special law. No other authorization is granted. In fact, the bank has the monopoly of bank-note issue.

In exchange for this privilege, and for the admission of the notes in the treasuries of the States, the bank offers certain advantages to the State, and pays it considerable sums.

It performs the service of the state treasurer at Brussels, and in the forty agencies which it has in the country; the service comprises not merely the receipt of all the payments of the public accountants and the payments of orders, but all that relates to the public debt, exchange of evidences of debt, repayment, and the payment of coupons.

It undertakes the custody of the evidences of the public debt which belong to the treasury or to the various public offices, and is also charged with the investment of available funds of the State in foreign drafts.

It manages the portfolio of the savings-bank established by the State.

These services are entirely gratuitous.

The bank pays for the State the salaries of the agents of the treasury, the functionaries employed in the delivery of orders of payment and of receipts, and in the management of whatever is paid out or received for the State.

It hands over to the State one-fourth of all its profits in excess of 6 per cent. of its capital.

It also pays to the State whatever is produced by the discount above the rate of 5 per cent.

It pays the State, besides the wholesale price of the stamps required for its notes, ½ per cent. upon the circulation in excess of 275 millions francs.

Such are the relations of the bank with the State.

The operations of the bank are strictly limited.

It can purchase public funds, but only to the amount of its capital plus the reserve formed by the sinking-funds held back from its profits.

The ordinary investment of the capital which it obtains by means of its deposits and of its issue of notes is, independently of the necessary reserve, the discount of commercial paper at not more than one hundred days' time, and also in very limited proportion loans upon public funds with the same limit of time.

Outside of these operations the bank can only engage in dealing in the precious metals.

The constitution of the bank fixes the reserve which it must keep at one-third of its engagements, deposits, and notes in circulation; but the Government can authorize the bank to go below this proportion; in reality the proportion is often one-quarter, because the bank buys drafts upon which it can always realize immediately, and which are thus equivalent to an increase of its reserve.

No regulation fixes the proportion between Gold and Silver in its reserve; for a long time two-thirds at least of its reserve have been of Gold.

The bank, in return for a small charge, undertakes the custody of instruments of credit, which are placed in its hands in sealed boxes.

The organization of its discounting presents features peculiar to Belgium.

The board of directors do not discount directly except at Brussels and at Antwerp. It has in all its branches a discount agency, composed of members whom it names, which, subject to the approbation of the central office, accepts or refuses the paper presented; the members of these discount agencies guarantee to the bank under personal liability the payment of the paper they discount; they receive on this account one-fifth of the product of the discount.

Deposits draw no interest; they give the depositor the advantage of checking against them, and also of receiving payments made to his credit in any of the country branches.

The bank, by means of its system of crediting, performs the same service for any one who chooses to demand it.

A deposit may be made of any sum at the main office, or at any agency of the bank, and it will be paid to the person designated at any other office of the bank. The person depositing receives a check payable to order, which is paid in full the next day or the day after.

The bank also undertakes, without charge for those who keep deposits in its hands, in the principal cities, the collection of all their paper coming due; it requires merely that the paper should be handed in some days before it is due.

No. 7.—Banque nationale. Lois organiques statuts réglement d'ordre interieur. Broch in 8°. Bruxelles. 1878.

No. 8.—Banque nationale. Assemblée générale des actionnaires de la Banque nationale rapport fait par le gouvenneur au nom du conseil d'administration. Broch in 4°. Bruxelles. 1878.

[Deposited in the Library of the State Department at Washington.]

II.

PROPOSITION OF THE BELGIAN MINT.

ROYAL MINT.—*A. Allard, Director.*

BRUSSELS, *3d September*, 1878.

To Governor FENTON,
President of the American Commission to the Monetary Congress of 1878,
Hotel Meurice, Paris:

Mr. PRESIDENT: Now that the International Monetary Congress has arrived at a decision, and that Europe appears decided to remain almost neutral in the conflict relative to Silver Money; now that, in consequence of this decision, the Government of the *United States of America* finds itself directly and exclusively in the presence of *Germany*, and forms with that nation the two governments most directly interested in that question, it would be without a doubt contrary to the nature of the facts of the position to allow *England* to remain the only regulator of the price *of fine Silver in the world*, up to such a point, indeed, that the price of the London market regulates even now the price of that metal in America.

To the *United States only*, it seems to me, should belong henceforth the *right* and the *power* to direct and to *regulate the world's markets of fine Silver.*

This end can be easily arrived at by a simple administration measure of the United States Government at Washington, a measure which *would not necessitate* on its part *any expense or sacrifice* of any kind.

It would be simply necessary that the American Government, which has to coin from this date up to 1879 such a mass of Silver Coin for the resumption of Specie Payments, should *address itself to the Mint at Brussels*, and should authorize it, on the condition that the Belgian Government would superintend the Coinage, *to coin either Dollars or fractions of Dollars* of Silver of the weight and fineness laid down by the American law, *under conditions and at a price which the Government of the United States itself should indicate.*

The American Government should fix a Monetary Tariff; that is to say, the quantity of coined Dollars that the Brussels Mint should be author-

ized to deliver to the bearer of each kilogramme of Silver who presented himself.

The Dollars remaining over and above would be the property of the American Government, and would form *the profit of that Government precisely as if the Silver had been coined in America.*

If the price thus fixed by the Government of the United States is of a fair average, all the importers into Europe of American products who desired to cover their imports advantageously and easily would coin Dollars at the Brussels Mint and would remit these Dollars to their American correspondents.

Thus, then, without any expense, the Government at Washington would facilitate the resumption of Specie Payments; would facilitate the movement of its merchandises in Europe; would facilitate the absorption by commerce of its Silver Dollars, and would receive, at the same time, the same, if not a superior profit, as if these Dollars had been coined in America.

The price that the American Government would fix for the Brussels Mint *would vary according to the orders received from Washington*, and according to circumstances and the convenience of that Government.

The American Government could designate an *official American agent*, who would not only be charged with the *reception of the ingots*, but who would also overlook the proper *application of the price fixed officially*, and who would be charged with *making safe and receiving the profit belonging to the American Government.*

As soon as this state of things would be established it would suffice by a *simple decision of the American Administration to change, even by a telegraphic dispatch, the quotation for Silver in Europe.*

From that moment the London market would find itself reduced to a state of paralysis.

The United States would be able, even, under certain conditions, to exercise a decisive power on the relations of England with India and China, and thus facilitate, to the detriment of the English markets, its own commerce on the Pacific coast with those peoples of the extreme East.

The day, by way of example, that India or China demand that Silver be sent them from the English market, it would be possible for the American Government, and without imposing on it a very heavy sacrifice, to elevate a little forcibly the tariff established for the fabrication of Dollars in Belgium, and by this simple act to elevate the price of Silver in Europe in such a way as to take away the possibility of England sending, with any advantage, its Silver toward India.

These expeditions not being then possible from London would be made by means of the Silver of the American mines, by way of San Francisco, and would serve at the same time to develop American influence and the trade of the United States with India and China.

To sum up, sir:

This measure, so simple and so practical, would give to the United States the following immense advantages:

1st. It does not necessitate the advance of any capital from the Treasury.

2d. It obtains, nevertheless, for the American Government the same profit on the Dollars coined in Belgium as if they were coined in America.

3d. Commerce, which by the simple fact of its causing Silver to be coined engages to put into circulation the moneys so coined, facilitates the work of the American Government in its task of resuming Specie Payments.

4th. It would open up a new advantage to exporters to Europe of all American merchandise.

5th. America, thus controlling the tariff of Silver in Europe, would have the means of action, great and unfailing, to stop the wavering tendencies towards a fall in the quotation for Silver in London.

6th. The London market would not be any longer the regulator of the price of Silver for the entire world. This power would rest entirely in the hands of the American Government.

7th. And the commercial relations of America with India and China would find new sources of development, to the great profit of the American Silver mines.

May I be allowed to hope, Mr. President, that you will be so good as to take into your serious consideration the measure herein proposed, and at the same time to sign myself, Mr. President, your most obedient, humble servant,

The director of the Brussels Mint,

A. ALLARD.

HOTEL MEURICE,
Paris, September 6, 1878.

SIR: I have the honor to acknowledge the receipt of your very interesting letter of the 3d instant.

It seems to be a fitting addition to the discussions of the late Conference, and I will feel myself at liberty to make your views known to my Government in the report to the Secretary of State upon the return of the Commission to my country.

Please accept the thanks of myself and associates for your friendly interest, and believe me,

Yours, very respectfully,

R. E. FENTON,
Chairman, &c.

To M. ALPH. ALLARD,
Director of the Brussels Mint.

HISTORICAL MATERIAL

FOR AND

CONTRIBUTIONS

TO THE

STUDY OF MONETARY POLICY,

SELECTED AND PRESENTED BY

MR. HORTON.

Hon. WM. M. EVARTS,

Secretary of State, Washington:

DEAR SIR: On completing, in December last, my official duties in connection with the late Monetary Conference at Paris, by putting in your hands the corrected French and English Records of its Proceedings, I had the honor to say that if it were intended, in pursuance of an idea which I recalled your having mentioned in June last, to supplement the record as printed with matter of Appendix, documents, etc., germane to its subject, I should gladly present what contribution to this end my brief leisure from private affairs would permit me to put in order.

In pursuance of the request then expressed by you, I herewith offer a considerable body of selected documents (including some translations), the appearance, or reappearance, of which in print, seems opportune, in bringing within reach of an enlarged range of readers matter embodying some points in the history and doctrinal basis of the monetary policy of the more powerful States; and with these I send some papers designed to serve as preface and explanation.

Trusting that what I have been able to do, may contribute to that re-examination of the grounds of monetary policy which the time demands,

I am, dear sir, with respect, very sincerely yours,

S. D. HORTON,

Late Delegate, etc.

POMEROY, OHIO, 1879.

INTRODUCTORY.

To those at all familiar with monetary history it is well known that the adoption, or alteration, of a ratio for coinage and Legal Tender, between Silver and Gold, has been one of the chief problems of Monetary policy.

Nature having provided for man, two metals, indestructible, structureless, ductile, and rare, and hence uniquely fitted to serve as Money, their inevitable use in one and the same function has inevitably compelled the recognition, at some point in the scale of their relative weight, of an equivalence of value; and Money being a political institution, it fell to the State to fix upon this ratio of equivalence.

Aristotle enumerates among the prominent subjects in the "Economy of a Ruler" that he know when to raise or lower the value of Money; and that provision of the Constitution of the United States which reserves to the Federal Government the right not merely to "coin Money," but to "regulate the value thereof," is an evidence that this function of rulers has not lost importance in the course of centuries; while, in our day, the chain of testimony to this truth is supported by the earnest discussion which preceded the adoption, and by the adoption itself, in the new German Empire, of the ratio of 15½ between the existing Silver and the new Gold Coin, for that period of transition from one to the other, which, after the lapse of years, seems still remote from completion.

In late centuries, it is safe to say, that the object of such regulation of the relative value of the Precious Metals, when coined, has generally been, not merely to eliminate doubt in the respective nations, concerning the relative rates of currency of coin already in actual use, but with a view to motives of general policy; to guard against exportation to foreign countries of one or the other metal, or to obtain a concurrent circulation of Silver Coin and of Gold Coin at the legal par. In spite, however, of this purpose, a tendency has been at work to widen the

breach between the estimation of the two metals. Gold, fixed by law a few hundred years ago at 11, is in our day fixed by Germany at 15½ to 1 of Silver. The most efficient factor of this tendency lay in the fact that Gold, being intrinsically the nobler as well as rarer metal, and being already by force of law many times "lighter," as Money, than Silver, it has not infrequently been an aim of national legislation to attract Gold and to hold it, within the borders of the legislating nation, while at the same time the common practice of debasing the coin, with which the student of history is familiar, found a particularly congenial sphere of profit in these elevations of the ratio. When, in a circle of nations, acting with narrow view, a movement toward giving a legislative premium upon Gold was once fairly on foot, it tended to perpetuate itself. A. having raised the ratio 1 per cent., B. would be inclined to raise it higher still if he desired to outbid A., and C., if moved by the desire to draw Gold from both, must raise its rating still higher.

While, therefore, the task of the monetary legislator has been to protect the circulation of Metallic Money in his own country from a depletion, or from redundance, of one or the other metal, and to secure the possessors of one or the other from loss by its under-valuation, this task has been complicated, not merely by causes inherent in the supply of the metals, or in the demand for their use in the arts, but by great fluctuations of demand arising out of the caprice of the legislation of foreign States.

In the nineteenth century a new element of discord between the metals has further weighted the burden of the monetary statesman.

The leading commercial nation of the world has rejected this general desideratum of the nations, a concurrent circulation of the metals, and cleaving to one of the metals, and that the lighter and the less abundant, has prevented the circulation, as Money, of the heavier and more abundant metal within its borders. This attack has not merely complicated the problem, in other States, of securing a concurrent local circulation, but tending to enlist other States in a similar attack, it threatened anarchy in the general relations of the two metals throughout the world. The concurrent presence and use of the two metals in the monetary circulation of the world is necessarily a "balance of power" of man's devising, as is the concurrent circulation of the metals within the borders of a single State; and in transferring the weight of the law from concurrence to what, for a moment, I may be allowed to call anti-concurrence, England drove the wedge for a severance which, if carried far enough, must reduce the Money of the world from a state of comparatively stable equilibrium to one of instability of equilibrium, which if not cured by concurrent action must become chronic. It is only of late, however, that the wedge has been driven further on its appointed path, and only lately that this new element of difficulty in the path of the monetary legislator has assumed proportions that excite general alarm. A doctrinaire propaganda in favor of the English system of Money,

which was heralded as being itself a potent factor of England's prosperity, has led to the inchoate extension upon the continent of Europe of the English system of rejecting the heavier metal. The attempt, at a time when the yield of the gold mines was waning, to replace Silver by Gold, to a slight extent, has been followed by a subsidence of prices expressed in Gold, and by such a widening and such fluctuations in the distance between the two metals as to produce disastrous symptoms in the economic structure of the world, local production and international exchange having alike languished and the landmarks of property being dislocated.

The metallic basis of the valuations of Europe still, after years have passed, consisting to a very large extent of Silver, while, broadly speaking, in the inter-continental trade of the world, gold-using Australia and the United States are balanced by silver-using South America and Asia, and no means appearing by which Silver is to be induced to sink out of the reach of money-using man, and Gold is to be created afresh to take its place, the question arises before the powers that be, as it did at the dawn of history, what shall be the *modus vivendi* between the two metals which to-day, as at the dawn of history, share between them the field of Money. For Europe the future of existing valuations is still at stake, while Great Britain,* the chief commercial power, has an exceptional interest in regaining that security in dealings between the two monetary hemispheres which has been the servant of her prosperity, and which the statutory equilibrium maintained by non-English States has enabled her, until lately, to enjoy.

To the current which has brought the world into this condition the United States has offered an opposition characterized by a breadth of view not often enough paralleled in the action of nations.*

It has not only proposed that the Great Powers shall act in concert upon a definite plan, upon this question of the concurrent circulation

*Although the coining of from two to four millions a month of Dollar Tokens in Silver, and that, at a ratio different from that of Europe, may well have strengthened the European champions of the Gold movement with false hopes for future sales of European Silver for American Gold, and although the Silver absorbed for coinage in the United States alleviates, by its mere withdrawal from the market, the evils which must be relied upon to reveal to Europe in its true light the bad advice which it has been following, still this so called "Remonetization" is a feature of policy insignificant compared with the other action taken by the Congress of the United States. In the presence of a popular agitation at home in favor of Silver, the Congress has said to the agitators: Free Coinage of Silver here would be a blunder in policy; and, in the presence of evils produced throughout the world by an agitation in favor of the Gold Standard, it has proposed a remedy whose effects will be co-extensive with the ill.

In connection with the remedy proposed, the refusal to coin Silver freely became, therefore, positive and not negative; it was an act, not an omission, for it indicated that in willing a great end the United States was capable also of willing the means to attain it; that it was ready, if need be, to meet aggression by resistance, and, by stopping the coinage of Silver entirely, to leave Europe at the mercy of the consequences of its own Persecution of Silver.

of the two metals as the Money of the world, but has offered for consideration a policy, in which it is ready to co-operate, the adoption of which, by restoring to international trade a concurrent circulation of the two metals at par, must put the business of the world upon a foundation more stable than it knew before the modern Persecution of Silver had begun.

In a word, in this Ishmaelites' struggle of the nations, for the yellow, at the expense of the white, metal—a struggle which in one way or another is a succession of defeats for all concerned—America, although well equipped for monetary war, has offered Europe terms of enduring monetary peace.

The question is still under discussion.

The world therefore finds itself in the presence of controversies of doctrine and of problems of statesmanship, which, in their varying phases, are likely to occupy a broader space in the public eye than in times past. Whatever be the result, there are lessons to be learned to neglect which would be folly. The object of statesmanship is the welfare of the people, and when people are grievously oppressed by the effects of a measure adopted at the instance of a well-meaning school of scientific opinion, it is the interest, both of statesmanship and of science, to discover and to disinfect the error as speedily as possible. If the *status quo ante bellum* could be now restored, if the parity of exchange that existed before 1873 were re-established under conditions such as formerly obtained, if the future were unclouded by the fear of further demonetization: if, in a word, the dangers of the present situation could, by some magic, be removed in a night, the questions here raised would still retain their importance for mankind.

Has or has not the Monetary Legislation of Germany and its corollary, the closing of continental mints to Silver, wrought great harm to mankind?

If it has done this harm, how was the result of this ill-doing brought about, and upon what errors of doctrine was this colossal blunder fed?

In the presence of a discussion of such import I had hoped that it would not be without use to bring within easier reach of the student some portions of the records of late national experience in matters of Money, and notably in this matter of the maintenance of parity and concurrent circulation of the metals.

In presenting such selections of material for reprint or translation, with such accompaniment of editorial discussion as time has permitted me to set in order, I feel bound to record my sense of the incompleteness of these Contributions to the Study of Monetary Policy. I should add that I have purposely avoided giving space to reproducing information or argument which has already been placed within comparatively easy reach of the public in the invaluable Monetary Documents put forth of late years by some European governments (see list, page —— *et seq.*), but in the selection of material have rather endeavored to supplement

or reinforce the instruction, often statistical, contained in these works by exposing some of the forces which had to do with producing the phenomena they set forth.

A point raised in the course of the discussions of the Conference relating to the monetary history of France suggested the desirability of bringing before the public some account of her experience in connection with the present legal ratio of the precious metals, and, at the same time, the coming to the surface of disputed points in English monetary history counselled the presentation to the student of matters illustrative of that history; while the reproduction of the CoinageStatutes of the United States in 1868, in the Report of the British Commission on International Coinage, had suggested that the courtesy be returned by the appearance in this volume of statutes embodying the later monetary legislation of Great Britain.

In the selection of material from the past activity of Americans on the subject of money, the comparative rarity of many official documents*—buried withal beyond the ken of the student, even in the Libraries that contained them, through the lamentable absence of a Catalogue of the publications of the Government—counselled their reappearance in print with a fullness which otherwise would have been unnecessary, while the discussions of Metallic Money in the Continental Congress having, in large part, remained either in manuscript or unpublished, the occasion seemed a fitting one to present them to the public.

The fitness of presenting to the reader the Proceedings of the First International Monetary Conference in connection with those of the Second, is so obvious as to require no explanation.

Before closing these words of preface, I may here be permitted to suggest a contrast of doctrine concerning the valuation of the precious metals, upon which the student may advantageously be led to seek light in the historical events set forth in the following documents.

It has generally been regarded as the dictate of reason, that, in the adoption of a legal ratio, with a view to concurrent circulation of the two metals within its domain, the existing rates of exchange of the metals in the market should serve as a practical guide of choice. The Legal Ratio is therefore selected with special reference to the rates of bullion exchange in the markets, to the actual rates in the past, and to the probable rates in the future.

It has not, however, been as well understood that the legislator himself, in choosing a ratio, was setting in motion a force which, in due proportion to the quantity of metal which his people used, and in some degree to the rapidity of its circulation and to the existing equilibrium of

*I desire to express my indebtedness for the courteous assistance rendered me in the preparation of this material by Mr. Theodore F. Dwight, Librarian of the Department of State and Custodian of the Archives of the Government; by Mr. Sevellon A. Brown, the Chief Clerk of the Department of State; by Mr. A. R. Spofford, the Librarian of Congress; and by Mr. Mellen Chamberlain, the head of the Boston Public Library.

other legislative demands, *tended to make the event justify his choice.* It is but lately that, in my view at least, the analysis of facts has here eliminated a principle of science which, if I be not mistaken, is destined to work a reconstruction of the monetary policy now in vogue. It has not, until lately, been understood, nor, indeed, can I assert that it is now generally admitted, that the market rate of exchange of the Money Metals is itself, to a preponderating degree, a resultant of conflicting demands for these metals respectively, for use as Money; and is not merely an index of some supposed preference of mankind for their respective use in the industrial arts, nor again a reflex of an altered cost of production, or of a fluctuation in the yield of the mines for a few preceding years. That the latter-mentioned factors have their place will still, of course, be admitted, but their place is a subordinate one.

Now, it will be obvious, upon examination, that this demand for the metals for use as Money, of which the exchange of bullion in the market is, to such a degree, a resultant, is to an important extent within the control of legislation.

The self-interest of the individual offers to the powers of society centralized in governments, a means of regulation of the exchanges of various kinds of Money, which may perhaps be advantageously portrayed in its analogy to the control of the engineer over the waters of a lake or reservoir. The task of the engineer is merely skillfully to enlist the force of gravitation on his side, and the water is guided as he wishes; and with the aid of the gravitation of self-interest the wise laws of the money-using nations can achieve an analogous task. Under the gravitation of self-interest man inevitably seeks whatever may legally be tendered in discharge of his obligations, and if there be a choice of these Legal Tenders he tends to take that which in one way or another offers him the greater profit. In determining whether one metal or the other shall be Legal Tender, or whether either one of the two shall be optionally Legal Tender at a schedule rate, and in regulating the supply of this or of that kind of Legal Tender by control of its own Coinage, or of the currency of foreign Coins, the law of each nation has directed the force of the demand of those who deal in its Money, upon this or upon that metal, or upon either interchangeably at a fixed rate, according as one or the other can most profitably be had.

The importance, if true, of the doctrine which I have thus affirmatively stated, will suggest itself forcibly in the consideration of the problems of the fixation of a ratio with a view to concurrent circulation of the metals; and the question of a "normal" ratio will, perhaps, be seen to resolve itself into the consideration of what is the "normal" treatment which the Money Metals should receive at the hands of enlightened governments.

In concluding, I may further suggest to the thoughtful reader the question, whether the great desideratum of all Monetary Policy, stability of value, security in exchange, which was the goal which the United

States set before Europe in calling the Conference, might not, in some fruitful measure, have been attained long ago, and preserved for after generations, had England, by adopting in full the advice of Newton, attained a close approximation to unity with France, then at $14\frac{5}{8}$, in 1717; or had France obeyed the guide which the market rate subsequently afforded her, and adopted the ratio of 15; or again, had not the United States, in 1834–7, passed by the counsel of her soundest advisers, and neglected to adopt the ratio of 15.62.

Three separate times, one might say, the world has stumbled upon the treasure of unity of ratio, yet has never recognized it nor possessed itself of it.

England had her opportunity in 1717; France in 1785 and 1803; the United States between 1834 and 1837.

Has anything been gained by the failure to improve them? Has the world, or have these countries themselves, received any benefit through England's not adopting the French ratio; through France's not adopting the American ratio; through the United States' not adopting the French ratio? The conflict of coinages which has obtained for all these years has brought much work to the mints, much profit to dealers in the precious metals. But what has the world in general gained? At 16, to take the result of the late fixation, Gold is relatively ten per cent. more portable, Silver ten per cent. heavier than at $14\frac{1}{2}$. Is this an advantage? Wherein lies the benefit? Is it not rather an inconvenience? Again, has this raising of the rating of Gold exerted a beneficial effect upon the production of the mines in checking the yield of Silver, which threatened to be too great, and stimulating the yield of Gold, which threatened to be too small? It is difficult to discover any appreciable benefit. In the last century Brazil emptied its mines of Gold while Gold was below 15: would Siberia, California, Australia have been more backward? As for Silver, the rate of $14\frac{1}{2}$ as compared with 16 could mean, certainly until the Gold discoveries, no important rise in its purchasing power; and of course it is the general purchasing power, not its relation to Gold, which determines whether its production is profitable. And to-day, if England, France, and the United States were in union, need Nevada's Silver excite alarm?

Wherein, then, has the world in general profited by the Monetary conflict and instability which has endured so long? Is there anything in past history which should lead mankind to prefer uncertainty to certainty—doubt to confidence—conflict to peace—instability to stability, in the regulation of its Money?

And lastly I may ask, if the ratio must be raised at all, and this may be admitted without affecting the argument, would it not have been better for all nations concerned, more equitable, less disturbing to the general confidence, and hence to the general weal, if the elevation of the legal ratio had been brought about by concurrent action of the nations interested, rather than by the conflict of national policies which actually obtained?

FRANCE.

THE RATIO OF 15½ IN FRANCE.

I.

INTRODUCTORY.

At the opening of the sixth session of the Conference, in pursuance of an announcement on the part of the President, M. Ruau presented as an exhibit the Declaration of 1785, reprinted on page 154, by which the ratio of 15½ was first established in France.

To not a few students of Money this fact will first be made known through this announcement.

In an important work on the Production of the Precious Metals, just published, Professor Soetbeer, the Monetary Counselor of Germany, marks this announcement of Mr. Say as an event of importance in monetary discussion.

"It is well known," he says, "that the ratio of 15½ to 1 has been of late accounted to a certain extent the normal relation, inasmuch as it lies at the basis of the Double Standard in the countries of the franc, and as the prices of Silver have, on the average, remained close to this ratio throughout the first seven decades of our century, and in view also of the fact that the transition from the Silver valuation to the Gold valuation in Germany has taken place upon this basis. The French Monetary Law of 1803 has hitherto been almost invariably regarded as the starting-point of this opinion. The French Minister of Finance, Léon Say, has, however, employed the occasion of the International Monetary Conference in August, 1878, to point out, by reprinting an older French Ordinance of October 30, 1785, that the recognition of this ratio had already taken place eighteen years before. Article I of this ordinance is as follows," etc., etc.*

*From Soetbeer, Edellmetall-Production, Gotha, Perthes, 1879, page 130.

Although allusions to the recoinage at 15½ in 1785 may be found in one of Gallatin's writings of forty years ago, as well as in Chevalier's *La Monnaie*, and in one of Cernuschi's works, yet, for the general reader, Dr. Soetbeer has certainly not overrated the novelty of the information presented by Mr. Say and Mr. Ruau.

In general monetary discussion, not only is French Bi-metallism identified with the Law of 7 *Germinal*, year XI, but 1803 is regarded as the date of the birth of the ratio of 15½.

Now, the law of 1803 has been the great bone of contention over which the battle of the Standards has raged in France, and as France has herself been, so to speak, the chief theater of the Continental conflict on monetary subjects which has been going on for a quarter of a century, it is not unnatural that to the great mass, both of lookers-on and of combatants, the law of 1803 should occupy a position of commanding interest.

Did the law of 1803 by implication ordain what the American law of 1793 did explicitly? Did it "put the Standard in the two metals," or was Silver the real Standard and Gold merely a brilliant satellite of Silver?

The importance of the question, the intensity of feeling which it excited, may most aptly be suggested by the eloquent words of the first elaborate and comprehensive treatise ever written on Money—I refer, of course, to Chevalier's *La Monnaie* (see pages 220 and 221, ed. 1866)—in which the distinguished author, appealing to the law of 1803, vindicated the right, "inalienable, imprescriptible, absolute," of the holder of French National bonds to have them paid in francs of 5 grains of Silver $\frac{9}{10}$ fine, and scornfully rejected the claim of francs of Gold ever to be the measure of the obligations of France.

Now, in the controversies waged over this law of 1803, one point has been accepted, namely, that in 1803 15½ was really the rate of exchange of the metals in the market. It is safe to say that by members of the various great Commissions instituted by the Second Empire of Napoleon, that great edifice of ambition which was to have been crowned with metric and monetary unification centering in Paris, it has not been questioned that the ratio of 15½ was not created arbitrarily, but was adopted because it was recognized as an "economic fact"; because, in the movement of the world's supply and demand for the metals, respectively, 15½ was the "normal" point of equilibrium, so that the fixing of a ratio by French law was, in point of fact, a mere echo of "commerce;" that it was merely a ratification of the market rate of exchange between the metals as bullion, which had been fixed by commerce *independently of the influence of French law itself.*

Now, the monetary questions of to-day resolve themselves, on final analysis, into the assertion or denial that governmental policy sensibly affects the demand and may regulate the ratio of exchange of the metals; and it is plain that if the French legislator had chosen a ratio which was not the ratio of the market, an opportunity would have been

given to study the effect of the introduction of Free Bi-metallic Coinage, with a minimum mint-charge, in the country which held a larger stock of the Precious Metals than any other two of the civilized nations; while the admission that the French legal ratio was, in fact, merely transferred from the market to the statute-book deprives controversy of the benefit of this test.

It is evident then that, apart from the mere question of history, a point of considerable interest in monetary doctrine is involved in this matter of the adoption of 15½.

When, therefore, the attention of the monetary public is called to the fact that the ratio of 15½ was established in 1785, not in 1803, is it not natural that the elastic faith of the monetary public should be ready to assume that what was believed to be true before should remain true, that the French legislator had not wandered from the teachings of what French thinkers maintained to be those of science, and hence that 15½ was the market ratio in 1785 as well as in 1803? Circumstances seem to warrant this inference. The statement of the President of the Conference, on page 57, clearly points in this direction, while some expressions of the learned Chief Delegate of Switzerland in the Conference touch directly upon the point. The reader will find on page 82 an allusion of M. Feer-Herzog to 15½ as the extremely fortunate or happy (*heureux*) ratio which France had adopted in 1785, while on page 81 the learned Delegate deliberately attacks the American ratio of 15, adopted in 1793, because it was too low, and imputes peculiar motives to Alexander Hamilton for choosing 15, when he should, in M. Feer-Herzog's view, have chosen a higher ratio, presumably 15½, or something near it. (See also page 460.)

But the reader has already remarked the comments of Professor Soetbeer on this point. He will observe that after noting how the ratio of 15½ had come to be regarded as "normal" from 1800 to 1870, this pre-eminent monetary authority alludes to the event to which M. Say called attention *as a recognition* of the ratio of 15½ in 1785. Of course, if the law of 1785 was a mere "recognition," it was a recognition of an existing fact; there must have been an existing market ratio of 15½ to be recognized, and, if this be true, the faith of the monetary public in the fidelity of the law of 1803 to the market rate may be safely transferred to the law of 1785.

Now, in addition to the historical and economic interest attaching to this subject, the question thus apparently taken for granted in quarters in which tone is given to public opinion has in a certain sense an international character.

The criticism of national monetary policy of the past is necessarily the school in which the monetary statesman of to-day must learn the lessons of experience.

If the natural assumption of which I have spoken, namely, that 15½ was the market ratio in and after 1785, be correct, it is plain that the

United States, in adopting the ratio of 15 in 1792, committed an error of policy* only equaled by the recoinage of Gold at 16 in 1834–'37.†

On the other hand, if the ratio of 15½ was not the ratio of the market, the policy of France becomes the subject of investigation; and if the ratio of 15 were then economically the fit one, anything derogatory to it is not only unjustified, but, withal, is *crimen lœsœ majestatis;* not merely because it was the choice of Alexander Hamilton, but also because from a metrical point of view 15 to 1 is, through its relation to the decimal system, the most convenient ratio which has been within reach of mankind in modern times, and hence *per se* preferable to 15½.

But not only is the character of the monetary policy of these two great States at stake, but that of England also. If, after 1785, Gold stood at a price in Paris so high, as compared with the English ratio 15.21, that there was profit not only in sending Gold in preference to Silver to Paris, but that there was profit in importing Silver from France into England to be coined into English money, how was it that this natural movement did not take place, that this natural "course of events" was turned awry, and never claimed the name of action? How was it that not until 1798 did the rise of Gold above 15.21 bring about the appearance of Silver at the English mints?

In presence of queries like these, so likely to arise if the study of monetary policy be further pursued, so necessary to be solved if the lessons of experience are to be rightly read, it seemed useful to supplement the information for which the monetary student is indebted to Messrs. Say and Ruau concerning the Declaration of 1785, by setting forth more in detail the motives and character of this important measure, and also, if possible, to present some information concerning the market ratio of the metals between 1785 and 1803.

Strange to say, this latter question, thus raised, strikes with hollow sound upon one of the empty spaces of modern monetary literature.

No one has apparently sought to collect material in order to answer the question categorically; nor, indeed, has any attempt come to my knowledge to compile any table of the rates of exchange of bullion in the market of Paris, such as Soetbeer published for Hamburg in 1855, and such as was compiled by Mr. Ingham for London in 1830. (See pages 708 and 647.) But more than this, the French monetary literature of that early date has suffered from not unnatural neglect.

In fact, both Chevalier and Wolowski, the well-known leaders of French thought, the one in his *La Monnaie*, the other in his *L'Or et l'Argent*, would seem to date the important scientific activity of France with 1803, and to treat what preceded 1803 merely as a preparation for, and purely in reference to, the law of 1803. And, strange to say, both of them mark the beginning of this preparation with a great speech of Mirabeau of December, 1790.

Under these circumstances, it seemed proper to present to the reader,

* See page 460. † See page 685.

in more voluminous extracts than would otherwise be necessary, two documents of date anterior to that of Mirabeau's speech, which not only define the policy of the recoinage of 1785, but throw light upon the law of 1803. One of these documents, in fact, presents the defense of this very measure, the recoinage of 1785, by the acute and accomplished statesman of the old régime who designed and executed it; while the second contains a mature criticism of it, made in 1790, by a Commission selected by the Committee of the National Assembly, and eminently qualified to represent French monetary science.

I should explain, also, that further reasons counseled the enlargement of the extracts to be made from these documents.

It was but just to the memory of the Finance Minister of Louis XVI that, in calling attention, after the lapse of a century, to the vices which contemporary opinion had found in this measure for which he was responsible, sufficient space should be allowed to set forth the main points of his brilliant defense of it; while, at the same time, the light which portions of these documents throw upon the inner workings of the Feudal or Seigniorial System of Coinage, in contrast with that which is known to-day, will, it is hoped, fully justify their full presentation to the modern reader, if indeed their intrinsic merit be not sufficient to insure their favorable reception on other grounds. To these documents I have added some notes on the address of Mirabeau, and extracts from the second report of the Minister of Finance under whose auspices the law of 1803 was passed; which latter sets forth, among other things, the controlling reasons for maintaining the ratio of 15½ in preference to adopting that of 15.

II.

THE RECOINAGE OF 1785—DE CALONNE.

SELECTED EXTRACTS FROM THE PETITION TO THE KING, BY M. DE CALONNE,* MINISTER OF STATE, 1787.

SIRE:

He who has been the director of your finances; he who has had the honor of being one of your most intimate councilors, without appearing unworthy of the place which he filled, and who still bears the title of a Minister of Your Majesty; he who is responsible to you alone in the important functions which you have confided to him, sees himself to-day the object of prosecution, denounced before your courts.

It is not, sire, my private conduct which is charged with fault; it is my entire administration which is attacked, by a vague accusation, which embraces everything and specifies nothing; that which I could not have done if I had had reproaches to fear has become the occasion of the reproaches which have been made against me: it is after I had myself requested and obtained from Your Majesty the permission to lay bare the situation of your finances before the eyes of the nation that I am treated as if I had brought my administration into suspicion by seeking to conceal it from public view; and the reward of conduct the most open has been that I am accused of disloyalty.

It was only through the decree of 10th August last that I became aware of the subject of the accusations against me: the decree which ratifies the charge of the Prosecutor-General of *financial depredations both in exchanges and in purchases, in maneuvers in recoining the Coins, in the funds of the Royal Treasury clandestinely furnished in order to support speculation ruinous to the State, through an increase of loans; and finally through abuses of authority of every sort committed in and about the management of the finances.*

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* Charles Alexander de Calonne (1734–1802) became Comptroller-General of Finances of France in 1783. It was under his administration that that increase of deficit in the revenues occurred which became the occasion of political movements culminating in the French Revolution. I translate from an edition in 2 vols., 4to, p. 207, London, 1787.—H.

SECOND POINT OF ACCUSATION.

MANEUVERS IN THE RECOINAGE (page 20).

If I had not received through a friend a copy of the atrocious charges which have been set on foot in this matter, and had not at the same time learned the details of all that the *Cour des Monnoies* has done since my departure; and had I been forced to content myself with my own inquiry and questioning what could be found to reproach me with, in what it has been thought proper to call the recoinage of the Coins, although it was only the Gold that was recoined, I never should have divined the reasons why a measure so just in itself, so useful to the general good of the State, so advantageous to your finances, and at the same time so profitable to all your subjects; a measure concerning which everything was decided by Your Majesty himself in his council, regulated by registered enactments and executed under the eyes of the chief officers of your Court of Moneys, an operation in which everything was public, notorious, and negotiated by the intermediaries who are by profession charged with it, could become the subject of an accusation against me.

EXPLANATIONS AND DOCUMENTS OF JUSTIFICATION.

STATEMENT OF THE OPERATION OF THE RECOINAGE OF THE GOLD COINS (vol. ii, exhibit ii, page 9).

I shall endeavor to express clearly what I have to say upon the operation of recoinage; and it is not an easy thing to do. Few people have clearly defined ideas of the combinations relating to coins. The books which have treated of this matter are obscure, and they are but little read; they possess no elements of attractiveness, not even that of being instructive. Abstract notions, difficult calculations, technical terms but little known, render unintelligible the language of the greater part of those who pique themselves with being versed in monetary science. One believes that they are profound because one does not understand them; and it is because they do not know enough of monetary science that they do not make themselves understood.

Confusion often arises between that which belongs to intrinsic metallic value and that which has to do with numerary and conventional value, between the market price of specie and its legal price; hence comes forth a swarm of errors, of false reasonings, of venturesome criticisms upon measures concerning whose results men permit themselves an opinion without knowing their cause.

It is this which has occurred in relation to the law which, in fixing a new proportion between Gold and Silver, ordained the recoinage of the *louis*. Those who have undertaken to censure it have gone astray in a labyrinth of badly applied principles and of chimerical inferences. They have pushed the abuse of words and the confusion of ideas even so far as to pretend that this change would bring about an actual degradation in the value of the *livre tournois*,* which is nothing but a numerary and representative denomination.

The execution of the operation was announced to be impossible; a general obstruction of trade was to result from it; a baleful stagnation in the circulation of specie, and the exportation of all the Silver in the kingdom.

At present, now that the operation has been completed without any one of these sinister predictions being realized; now that all that had

* The *livre tournois*, or pound of Tours, was, like the English pound sterling, a descendant of a pound of Silver, but its descent had been more rapid. It was then sometimes known as the franc, but was in fact about 1¼ per cent. less than the five grams of silver nine-tenths fine which subsequently became the metric monetary unit of France. There was no coin corresponding to the *livre*. There were écus, crowns, or dollars of 3 and of 6 livres; and there were coined various fractions of the crown, but no livre piece appears to have been coined. The *livre* was divided into 20 *sous*, and the *sou* contained 12 *deniers*, or pence.—H.

been judged dangerous and impossible has been peacefully attained, and that 650 millions [*livres*] in old *louis d'or** find themselves replaced by 693 millions in new *louis d'or* without this useful metamorphosis having caused the slightest inconvenience; the indefatigable desire of slander has fallen back upon the denial of the most obvious facts, and upon the suspicion of frauds the most improbable.

Men have refused to admit that it was necessary to add $\frac{4}{32}$ to the fineness of the old *louis* in order to raise it to the full legal Standard; and the attempt has been made to represent that these $\frac{4}{32}$ have not been actually added, but that they have been improperly held back in the account.

One might content himself with showing that to deny the one is the height of folly, and to suppose the other is an atrocious calumny, but it is more fitting, and will be more satisfactory, if we cast a glance over all parts of the operation; and to-day, when it is regarded as entirely completed, is the proper moment in which to fix public opinion definitively upon its motives, its execution, its effects; that it may remain well-settled that the motives for it were very pressing, the execution very faithful, and the result very beneficial.

FIRST PART.—THE MOTIVES WHICH LED TO THE MEASURE.

No great exertion is required in order to demonstrate that it was as pressing as it was indispensable to fix a new ratio between the price of Gold and that of Silver. It would be more difficult to explain how a truth so obvious—a truth which a single glance at the tables of comparison of the ratios established in the various states of Europe renders palpable—has not been perceived earlier; or, rather, how, having once been perceived, and it being in fact impossible not to recognize it, it has not more promptly brought about the decision which it must necessarily have tended to produce.

It is especially upon Spain and Portugal that one's attention must be fixed in any question of valuation of the metals, these States being the principal sources of their production. Gold and Silver are the natural product of their soil, as wine and wheat are of the soil of France. It is thus to these powers that it belongs to estimate their intrinsic value. This value depends upon the greater or less productiveness of the mines, upon the greater or less cost of working them, upon the greater or less consumption of the metals. These are the measures of the scarcity, and hence of the price, of the precious metals. Now these measures cannot be taken except within the borders of the nations which, owning the mines of Peru and of Brazil, pour their products into Europe. When, therefore, they think it their duty to raise or lower the proportion

*There is no necessity of guaranteeing here the perfect correctness of these amounts. There might be some difference of calculation in relation to what has occurred in the last three months, of which only an approximate estimate can be made; but the proposition will not be the less true in the meaning it presents.

between Gold and Silver, the rate which they establish necessarily controls that of other nations; it is for them the model or regulator.

Again, it is the States which are the richer, the more active in commerce, which give the alignment, so to speak, to those less rich, less active. Their influence on the rates of exchange of specie is in proportion to the greater quantity which they set in motion; and it is thus that the general equilibrium must be formed in the relation of the metals which serve for all exchanges and are become the representatives of all values.

Up to the year 1779 the price of Gold compared with that of Silver was: in Portugal, 15 marcs 6 ounces of Silver to one marc of Gold; in England, 15 marcs 2 ounces; in Spain, 14 marcs 7 ounces; in France, 14 marcs 5 ounces.*

The English ratio approaches that of Portugal while the ratio of France holds itself closer to that of Spain, which is in the natural order of things, since it is Portugal which furnishes Gold to England, while France draws it chiefly from Spain.

Portugal not having changed her proportion England has maintained hers; but in 1779 Spain with one blow raised the price of Gold $\frac{1}{15}$ while in France it remained at the same point. The result of this change has been that, since 1779, the marc of gold has been worth in Spain 15 marcs 7 ounces of Silver;† in Portugal, 15 marcs 6 ounces; in England, 15 marcs 2 ounces; in France, 14 marcs 5 ounces. The ratio in France was consequently 10 ounces below that of Spain, 9 ounces below that of Portugal, and 5 ounces below that of England.

The French merchant consequently lost in his exchanges every time that they were settled in Gold, since the Gold which he received was rated at a higher price than it was worth in France, and that which he was forced to give in payment was received only at the low price which it had in France in proportion to Silver. It can be proved by a simple calculation that this loss was 8 per cent. in transactions with Spain and 4 per cent. in transactions with England.

But, on the other hand, the speculators found a sure profit in exporting our Gold Coin to Spain to buy dollars there, since they there received 15 marcs 7 ounces of Silver for a marc of Gold, which cost them in France only 14 marcs of Silver [*sic*].

Hence, a very appreciable interest was enlisted in favor of bringing Gold into France, because there was loss in buying it elsewhere; and

* The "Paris pound" (*poids de marc*)=2 marcs; each marc=8 ounces; each ounce=8 *gros.* or drams; each gros.=3 *deniers;* each *denier*=24 grains. The marc weighed in English troy weight 3,780 grains, or nearly 8 ounces.—H.

† This is the price *de jure* as it was fixed by the Pragmatic of June 17, 1779, but it can be said that in fact it is now 16 marcs and even more, in view of the fact that the fineness of the new pistoles is now 13 livres per marc below that of the old ones. It is well known that to lower the price of Silver is to raise that of Gold; this remark should have an influence in all calculations, and it aggravates the effect disadvantageous to France.

an equal interest led to its exportation from France, because there was profit to be made in exchanging *louis* for Silver. In fact, they were actually worth more than 24 *livres;* and there was not a city in Europe where with the quantity of Silver in 4 crowns of 6 *livres* as much Gold could be bought as was contained in our old *louis.*

This inconvenience was necessarily enhanced as we extended our operations with the Bank of Spain for the extraction of Spanish dollars, for if it be in certain respects advantageous to us that the Spanish dollars should take their course by way of France, and that our bankers should have the business of paying to other nations the balances of their trade with Spain, it is plain that in this way the foreigner becomes a creditor of France instead of being a creditor of Spain; and as they find an advantage in having their payments made in Gold, while our bankers also find their account in paying them in that metal rather than by draft, the negotiation of which would be difficult, considering the rate of exchange which these adjustments have caused to rise to our disadvantage, it follows that the more Spanish dollars are imported into France the more *louis* are exported; and that to the inconvenience of losing our Gold is added that of suffering loss through the ratio when the accounts of foreigners with Spain are to be settled.

Exportation was not the sole cause of the scarcity of our *louis.* A large part were absorbed by being melted down, and in spite of prohibitive regulations, which are always powerless when opposed by a strong interest, they served all the purposes in which trade and manufacturers of objects of luxury make use of Gold.

And it was the low ratio which occasioned the melting of the *louis.* When Gold was not valued at our mints as highly as it was in the market, it was impossible to prevent the *louis* from having an intrinsic and metallic value higher than its legal and conventional value. The fact of this disproportion could not be doubted. In order to ascertain it, an exact verification was made of the price of Gold bullion in the Paris market just before the recoinage; it was found that on the 29th October, 1785, guineas were worth in the market 752 *livres* the marc. Guineas are coined of the fineness of 21 karats $\frac{3}{3}\frac{0}{2}$, and consequently the gold of the *louis*, if it were counted only at 21 karats $\frac{2}{3}\frac{0}{2}$, was worth 741 *livres* 4 *sous* 10 *deniers* the marc; and yet, notwithstanding, 30 *louis* weighing a marc were only legal tender for 720 *livres.* One could, therefore, for 720 *livres*, buy a marc of Gold in *louis*, which, reduced to an ingot, was worth 741*l.* 4*s.* 10*d.* There were thus 21*l.* 4*s.* 10*d.* per marc, that is to say, about 3 per cent. of profit in melting down the *louis;* hence they were melted.

If the existence of causes gives certainty of an effect, the existence of effects is also a proof of the reality of causes. Every one knows that hardly any more Gold was to be seen in France, and that it had become infinitely rare in Paris.

* The above rates imply a market price of 1 to 15.05.—H.

The treasurers for the King's Ready-Money have been of these late years reduced to pay 5 or 6 *sous* premium for *louis;* travelers often paid more, and it was very difficult to procure them.*

Beside this, the recoinage itself furnishes an unanswerable proof that within about half a century France has lost half of its Gold specie. It is ascertained that between the recoinage of 1726 and that which has lately taken place Gold coins have been struck to the amount of 1,300 millions [*livres*]. Up to January 1, 1787, only 557 millions worth had been brought to the mint, and as the operation was in its decline at that time, there can be no great error in estimating what has been bought since and what still remains of the old *louis* at a hundred millions, so that the amount would be in all 650 millions old *louis*, even including all that has come in from abroad, attracted by the profit which is offered by their price. The actual diminution has therefore reached the extent of a similar sum, 650 million *livres* or 27,166,667 *louis*, which have disappeared either by being exported or melted down.† Now, these two causes plainly had their origin in the improper ratio between the price of Gold and that of Silver: it was therefore indispensable to change this ratio in order to prevent the Kingdom from being entirely deprived of its Gold.

We must now examine whether this change, which was necessary, was well executed, and whether it was proper to choose the ratio of 15½ to 1.

There may be various ways of thinking and of calculating with reference to the selection of this ratio. They were discussed for a long time, and it will be seen that the considerations which determined the King and his council to raise the ratio to this figure were well founded and sound. It will further be seen that no inconvenience has resulted from it, and that none need result.

First, let what we have above observed be called to mind: that France was the only country in Europe where the proportion of the value of Gold and that of Silver was as low as 14⅝ to 1; that in Spain and in Portugal, the principal sources of these metals, the ratio is nearly 16 to 1; and that almost everywhere it is above 15. The mere inspection of these various valuations of Gold in the different countries ought to compel the recognition that the ratio of 15½ for France, who requires especially to align herself with Spain, is a mean term wisely combined.

It is true that, considering the price of Gold and Silver in their condition of merchandise, that is to say, regarding them only in reference to their actual metallic value, and not in reference to their legal and

* The *louis d'or* was 24 livres of 480 sous, and a premium of 5 or 6 sous is about 1 to 1¼ per cent.; 1¼ per cent. premium indicates a market ratio of Gold to Silver of about 14.84 to 1.—H.

† The Records of the Mint show that 738,157,152 francs' worth of louis were coined in accordance with the Declaration, before the coinage of Gold coin was stopped by the Revolution; I am not informed whether they were all the product of the melting down of old *louis*.—H.

conventional value, the ratio might have been fixed a little lower;* but it must be considered that the price of the metals, as merchandise, is in a state of continual fluctuation, for which reason they can only furnish the result of the proportion at the moment; that in consequence, these market prices cannot alone serve as guide and rule for a fixation of the ratio which is to become permanent. In fixing such a ratio it is not enough to align oneself with what is, but it is necessary, further, following the lessons of experience and the suggestions of reason, to meditate upon what will be in the future. It is impossible in such a matter to seize a point of absolute and mathematical precision, for this is itself movable and fugitive, it escapes at every instant, and varies, either on account of the various circumstances which may have influence on prices in the market, or on account of more general causes, themselves likewise uncertain, such as the comparative fertility of the mines, an alteration of the needs or even caprices of mankind, which may continually depress or raise the value of the metals in relation to each other.

Before the fortunate, or disastrous, discovery of the mines of South America, the ratio of Gold to Silver had not exceeded 10 to 1; it is only slowly and by degrees that this proportion has risen to the point where we now see it.

In 1726 the legal ratio was fixed in France at 14 marcs 5 ounces of Silver to a marc of Gold; and that which proves with how much sagacity this point was seized, is the fact that during a long course of years France retained in her circulating medium a sufficiently large proportion of each metal. Nevertheless, her Gold gradually became less common, and for some years this scarcity has rapidly increased; and this, precisely because its legal value has always remained the same while its metallic value has increased from year to year.

[De Calonne then proceeds to inquire into the probabilities of a general rise of the rating of Gold as compared with Silver. He finds that the amount of Silver money is increasing in a greater proportion than that of Gold. "Already," he says, "many Gold mines in the Spanish

* In the Paris market, in the course of the month of October, 1785, the time of the recoinage, the price of what is there called fine Gold and fine Silver, that is to say, Gold at 23 karats ¾, and of Silver at 11 deniers 20 grains, were quoted in the Paris market, fine Gold at 104 the ounce or 832 *livres* the marc, and fine Silver at 55 *livres* the marc; now 832 divided by 55 give for the proportion 15⅛ or about 15½.

In the London market, in July and August, 1785, the date of my first labors with the King on this subject, Gold of 21 karats ⅔, which is the fineness of the guinea, was at the price of £3 17*s.* 6*d.* sterling the ounce, which brings the price of fine Gold to 1,017½ pence sterling the ounce. Spanish dollars of the fineness of 10 deniers 17 grains were at 4 shillings 11½ pence sterling, or 59½ pence sterling the ounce, which takes the price of fine Silver up to 66⅔ sterling the ounce. The two sums divided the one by the other gives the proportion of 15½.

possessions have been on the point of being abandoned; and they would have been so had not the Spanish administration taken the course of reducing the King's share in the yield to one-twentieth, while on Silver His Catholic Majesty still receives his fifth." * * *

Secondly he observes also that there is a great increase in the use of jewelry and gilding, &c.

He then enters into the question of the general increase of the use of gold.]

In times not very remote Gold was extremely rare among the nations of the North, but it has been spread among them in great quantity, notably since those nations have enriched themselves through the maritime wars which have divided the greatest powers of Europe. They have exchanged the oaks of their forests, their iron and their hemp for the precious metals of which they formerly made but little use; and after limiting themselves to Silver, have now brought about a division of the Gold between themselves and the most opulent countries.

What is true of the peoples of the north of Europe will also become true of the inhabitants of North America, according as their agriculture and their trade increase and their industry becomes more active. New means will produce in them new needs, and all kinds of wealth will be introduced with all kinds of expenditure and of superfluities. Thus as the field for Gold ramifies in all directions and extends itself in the distance, it will necessarily become less abundant in the countries where it was once concentrated.*

It seems, therefore, that all these causes unite to make the price of Gold increase; first, an actual rise in value at the sources of production, and lastly, a consumption constantly increasing as the different nations advance in prosperity and in luxury.

It seems, therefore, probable that the same course which has hitherto been followed will continue for a long time, and that the demand for Gold being less abundantly satisfied than that for Silver, the former metal will continue to rise in value more appreciably than the latter.

In view of these considerations, physical and political, it was undoubtedly proper, in order not to be compelled to do the work over again, to carry the new ratio a little higher than that which for the moment the market price seemed to indicate. Judging by the results of sales in the market the ratio might have been limited at $15\frac{1}{4}$; judging by that of Spain, and even remaining below it, it might have been raised to $15\frac{3}{4}$. The moderate ratio of $15\frac{1}{2}$ was selected, which may be regarded as a proportional mean between the present price of the metals as merchandise and their conventional price as Coins in the countries that furnish them to us.

* There is certainly a touch of prophecy here which late events make interesting. The North Germans and the North Americans have lately caused a certain glut of Silver and scarcity of Gold in London and in Paris.—H.

This is sufficient to make it clear to those who are impartial and reasonable, the only class one cares to persuade, that it was not lightly, not without good reason, that the decision was made upon the ratio fixed by the edict of October, 1785. Already some of our neighbors have reproached themselves on this subject, and there is room to believe that example, reflection, and the influence of our commerce will in time cause its more general adoption.

One thing is certain, that in the view even of those who would find the ratio a little too high, no inconvenience for France could result from it; for on final analysis, all that can be concluded is, that henceforward Silver will gain more in favor, and that foreigners will prefer to take our Silver from us rather than our Gold, so that ere long the great mass of the circulation that remains in our hands will be Gold instead of Silver. Is this an actual inconvenience, one that is to be feared? Of course it must be admitted that when any ratio is once fixed upon in a kingdom by a permanent law, there is no way of preventing that one of the metals upon which another nation sets a higher price from escaping, to greater or less extent, in order to seek the place where it is more highly prized. But in the first place the danger of exportation is the less in the case of that one of the two metals which is the bulkier and less capable of being sent out clandestinely. But beside, what nation in Europe is rich enough to take away all the Silver in France? The very efforts which would be made for this purpose would necessarily make Gold dearer among the nations which would employ it in speculating in Silver, and would in time cause a fall in the price of Silver in places where it would be made to flow in excess; so that the operation would neutralize itself and the equilibrium would soon be re-established between the two extremes.

This chimerical dread of the exportation of Silver need, therefore, make no impression; and upon any hypothesis it will always be true that as no nation can be sure of retaining in equal quantity the two metals which compose its currency, it was wise and proper to take precautions, in preference, against the loss of that which has a natural tendency to increase in value in its relation with the other.

The proportion of 15½ is therefore neither excessive nor liable to any inconvenience.

SECOND PART.—EXECUTION.

[Vol. II, page 20.]

[In this chapter De Calonne discusses the policy actually pursued of melting the old louis and coining new louis of less weight, as compared with the plan of lowering the legal tender of the Silver crowns to 5 livres 12*s* and 6*d*. He then details the mode in which the recoinage was executed, giving special attention to the matter of fineness, the plan being, as before

stated, that there should be less alloy in the new *louis* than in the old, and that the tolerance or remedy should be reduced.*]

THIRD PART.—EFFECTS.

[Vol. II, page 3.]

To have proved that a new ratio in the comparative value of Gold and Silver had become indispensable; that that of 15½ to 1, which it was thought best to adopt, is just and proper; that the recoinage of the Gold was in all respects the best mode of establishing this new proportion, and that the recoinage itself was guided by principles of the most scrupulous justice, is already to have shown that this operation could only produce salutary and useful results. But one cannot refuse himself the satisfaction of tracing here a short enumeration of the various advantages which the State in general, and in particular the finances of the King, and the owners of the old *louis*, have drawn from it.

BENEFIT TO THE STATE.

France will henceforth be no longer injured in her exchanges as she was when she gave up her Gold specie at a price below its real intrinsic value as metal and merchandise.

A more correct proportion between the legal values of the two metals will maintain them both in circulation, and will no longer leave the realm liable to be presently deprived entirely of its Gold money, the preservation of which is essential to the general convenience, and peculiarly so to the trade of many of our provinces.

The total mass of money is largely increased, since there are two *louis* more to the marc, which in 900,000 marcs given by the melting down of

* I may here subjoin for the information of the curious reader the following additional memoranda of documents bearing upon the recoinage, which have come under my notice.

ADDITIONAL DOCUMENTS RELATING TO THE RECOINAGE OF THE GOLD COINS.

1.

New schedule of valuation of all the Gold Coins, their different denominations and their price (6 pp).

Decreed in the Council of State at Fotainebleau, October 30, 1785.

2.

Letters patent of the King proroguing the term at which the currency of the ancient Gold Coins must cease; suspending the exchange of such coins for 15 days, and increasing the number of mints in which the new Gold specie shall be coined.

Given at Versailles 11th December, 1785.

3.

Letters patent of the King fixing definitively the term of continuance of the lawful currency of the old *louis*, increasing the number of mints where new *louis* can be coined; suppressing the commissions of money-changers and re-establishing them under the name of offices, regulating the distribution of the new gold specie as well as the receipts which shall be given payable a month from date with interest.

Given at Versailles 18th January, 1786.

the old louis estimated at 650,000,000, makes more than 43,000,000 of increase of the national wealth.

The Gold coins will have their legal fineness in full measure; the *louis* will be of uniform weight in proportion to the value of 4 crowns of 6 *livres*,* and a greater facility in maintaining order and accuracy in this important and delicate department of the public administration will assure to it favorable opinion abroad as well as at home.

BENEFIT TO THE FINANCES OF THE KING.

The recoinage has brought to the royal treasury a profit of about 7,000,000; indeed it had been estimated considerably above this figure at the beginning; the calculation having been made on the basis of 18 *livres* to the marc, which is in fact the difference between the 750 *livres* which the marc of Gold which was put into the furnace cost the King, and the 768 *livres* which it produced in money value when it was divided into 32 *louis*. But inasmuch as it was necessary to deduct out of these 18 *livres*—1st, the cost of coinage, which reached 2*l.* 15*s.* the marc; 2d, 35*s.* 6*d.* to the marc of Gold for the difference between its price put at 750 *livres* and its intrinsic value, which at the rate of 21 karats $\frac{21}{32}$ is only 648*l.* 4*s.* 6*d.* [*sic*]; 3d, the $\frac{4}{32}$ of fineness which it was necessary to add in order to attain the legal fineness and which are worth 4*l.* 6*s.* 8*d.*; 4th, the cost of assaying, which comes to 21*s.* the marc; 5th, the inevitable waste in coinage, which may be estimated at a score of *deniers* the marc—it follows that the net profit for His Majesty was only 8 *livres* the marc, which, in a coinage of *louis* to the value of 650,000,000 *livres* equal to 902,772, gives 7,255,216 *livres*.

It is to be observed that the mere right of seigniorage on the basis of 11 *livres*, as it is fixed by the edict of 1771, deducting only the cost of mintage, would have produced more.

BENEFIT TO THE POSSESSORS OF THE OLD LOUIS.

The profit made by private individuals upon the *louis* which they took to the mint is easy to calculate. According to the law, 25 *livres* was to be paid for every old *louis* shown to have retained all its weight.

4.

Decree of the Court of Moneys, which forbid all persons of whatever quality or condition they may be to make exchange of specie of Gold and of Silver, under the penalty of a fine of three thousand *livres* and at the risk of further extraordinary punishment in case of repeating the offense.

Of the 8th February, 1786.

5.

Declaration of the King, which in interdicting the currency of the old *louis* after 1st January, 1787, continues for some time the exceptional price at the mints and money-changers.'

Given at Versailles 13th December, 1786.

H.

* The present *louis* is, therefore, intrinsically worth exactly 7½ deniers more than 4 crowns of 6 *livres*.

The greater part of them, however, were below full weight, and, in consequence, the profit for each *louis*, taking an average of the whole mass, was reduced to nearly one-fourth. If only 15 sous be reckoned for each *louis*, or 24 *livres* to the marc, the profit on 900,000 marcs would be 21,600,000 *livres*, which profit the excess of value of the old *louis* would have given to their owners, who were losing this excess of value before the time when the old *louis* had acquired a legal currency conformable to the proper ratio of the real price as metal and merchandise.

To so many advantages is added also that of having followed the counsels of an enlightened policy, which, meditating upon the experience of the past and the probabilities of the future, announced that Gold would continue to acquire constantly, and by uniform gradation, a notable enhancement of its value as compared with Silver, and that, consequently, a wise administration could not regard with indifference the gradual departure of Gold from the realm, under the influence of causes infallible in their effect; and that France, daily becoming poorer in the metal the price of which, obeying an order of events which must long continue to be active, could only be augmented, slowly, it is true, but constantly, incurred the risk of having its circulation gradually reduced to Silver coin alone, the value of which, compared with Gold, must constantly diminish in like proportion.

* * *

In closing this memoir, which is but a rapid *résumé* of what might be much better said, as well as at greater length, upon this great and important matter, it may be permitted to him who writes it, to add a last reflection, very excusable on his part, and one which he cannot refrain from making.

What a difference between the general recoinage of the Gold decreed in 1785 by Louis XVI, and all those which have been decreed and executed in preceding reigns!

Let the principal ones be for a moment recalled: That of the reign of St. Louis, the first of our kings whose coins were current throughout the entire extent of the kingdom; those of Philip the Fair, in whose reign there were frequent changes in the coins; those of Philip of Valois, in whose time the variations in fineness, weight, denomination, and currency of the specie were still further multiplied; that of John II, his successor, who recoined and altered his coins so often that (in the words of the letters patent of 17th September, 1351) with great difficulty could a man be found who could understand them (*à grande peine était il homme qui pût s'y connoitre*); those of Charles VI, which reflected the disasters of his reign; those of Charles VI, of Louis XI, of Charles VIII, of Louis XII, of Francis I, of Henry II, of Henry III, of Henry IV, all of whom had Gold coins struck in various denominations, the greater part of them dollars (*écus*) of Gold of the fineness of about 23 karats, and with a tolerance of one-fourth or $\frac{8}{32}$; those of Louis XIII in

1640, and of Louis XIV in 1689, 1701, 1704, and 1709, which reduced the *louis* to 22 karats, leaving the tolerance at one-fourth; finally, those of Louis XV in the years 1715, 1718, 1719, 1723, and 1726, which continually diversified the weight, denomination, and rate of currency of the Gold coins, still leaving the fineness at 22 karats, but raising the tolerance of alloy successively from 8 to 10 and from 10 to 12 thirty-seconds.

Let the causes and the results of all these recoinages be examined, and it will be seen that all of them had for their motives, considerations of benefit to the revenue (*vues fiscales*); and that that of Louis XVI is the only one which has had for its motive a great public and political interest; that many of them have wrought harm, none of them have been a benefit to the nation; and that that of Louis XVI is the only one by which private persons and the general public have gained; that the greater part of them have changed the rate of currency and the denomination of the coins without other motive than the profit of the royal treasury, and that some of them have even reduced the fineness by the extension they allowed to the tolerance of alloy; and that that of Louis XVI, founded upon the admitted necessity of fixing a new ratio between the metals has changed neither the denomination nor the conventional valuation of the coins; that far from reducing their fineness in any manner it has re-established it in its plenitude; that it has narrowed rather than extended the limits of the tolerance; and that at the same time it has prevented the exhaustion of her stock of Gold with which France was threatened, increased the mass of her currency, and restored to activity the circulation of the more precious of the metals.

Must it be added that none of the Ministers who have counseled recoinages that were useless and purely fiscal in their motive have been disturbed about them; and that he who has proposed with zeal and executed with success a measure generally beneficial, and which a wise King adopted only after mature consideration, is to-day compelled to defend himself against accusations which it has brought upon him? May at least some increase of light upon the subject which he has here treated, some strengthening of reasons for public confidence, result from it!

III.

THE MONETARY COMMISSION OF 1790.—DE FORTBONNAIS AND DESROTOURS.

EXTRACT FROM THE FIRST REPORT MADE IN THE NAME OF THE COMMITTEE ON COINAGE, BY GABRIEL DE CUSSY, DEPUTY OF THE DISTRICT OF CAEN.*

[Printed by order of the National Assembly, Paris National Printing Office, 1790.]

[The expert members of the Commission were: Bontin, Fargès, Valdeck de Lessart, de Fortbonnais, Desrotours, Dorigny, De la Châtre, Sylvestres de Sacy, Cressart, Tillet, De Borda, Lavoisier, Tournachon, Gresling, Oudart, Gillet, and Solignac.

The report states, page 4, that after considering various plans of conducting the investigations, that of Mr. de Fortbonnais† was adopted, and that it was closely followed in the report.]

* * * * * * *

(Page 9.) The third question discussed by your committee had for its object the relation which ought to subsist between the metals, coined and uncoined. Here are two aspects under which it is essential to consider Gold and Silver. First, as converted into Money; and second, as bullion; that is to say, considered as merchandise before conversion into Money.

The breadth of the subject and of the discussion upon it, and the desirability of confining ideas within limits of precision, which are necessary to produce clearness and correctness in conclusions, have led your committee to make a subdivision of the question—first, the facts were ascertained; then the discussion was apportioned under four heads:

* I am not informed that this document has been reprinted in France, and as I do not recall any direct allusion to it in print, excepting in the writings, contemporary with it, through which I was led to its discovery, it seems probable that the prestige of Mirabeau, notes of whose attack upon it will be found in this volume, may have condemned this document to undeserved obscurity. I am indebted to my friend, Mr. James Tallmadge Van Rensselaer, of New York, for its rendition into English.—H.

† François Louis Veron de Fortbonnais (b. 1722, † 1800), a publicist of influence and of great literary activity, Inspector-General of the mints in 1756, author of a standard work on the History of the Finances of France (1758).—H.

1st. The proportion established in 1785 between coined Gold and coined Silver, ought it to be maintained?

2d. If it ought not to be maintained, what proportion is it desirable to adopt?

3d. Is it proper to render the proportion invariable, and in what way should this be done?

4th. What means shall be employed to establish the proportion adopted?

For purposes of order and simplicity, the consideration of Gold and Silver in a state of bullion or raw material, before its conversion into Money, was relegated to the question of the tax upon Coinage; for this tax comprises the duty on mintage, generally called seigniorage, and the cost of Coinage, and without these charges, Money, in its divisions, would become in commerce nothing but a stamped ingot, and would become universal in conformity to the commands of reason, and of a policy favorable to the welfare of the nations. The fact presented by the relation of Gold, at 768 livres to the marc of 32 louis, is its exchange with $15\frac{4}{9}\frac{2}{9}\frac{9}{8}$ marcs of dollars, at 49 livres 16 sous to the marc.

But this relation of 1 to $15\frac{4}{9}$, very nearly, of intrinsic value, is not in fact preserved, partly because of the mode of Coinage, partly because of the tolerance. By reason of one or other of these causes, the exposure of which cannot be dispensed with, the marc of *louis d'or* cannot be considered as containing actually more than $4{,}141\frac{8}{4}\frac{8}{6}\frac{4}{0}\frac{4}{8}$ grains of fine Gold, and the marc of dollars more than $4{,}151\frac{8}{4}\frac{6}{6}\frac{4}{0}\frac{4}{8}$ of pure Silver.* From this results intrinsically the ratio in exchange of 1 to $15\frac{3}{5}\frac{0}{9}$, instead of 1 to $15\frac{4}{9}$; the fractions are curtailed in order not to fatigue the memory and attention. Upon this difference two remarks may be made in passing. The first is, that foreigners have more interest in speculating on the exportation of our Silver than is indicated by the proportion. The second is, that a part of the alarming disorder which exists in our Coinage comes from the tax on mintage, too often exposed to the speculations of private interests.

These premises established, your committee proceeded to examine the question whether the proportion established in 1785, by the recoinage of the Gold, ought to be preserved. One of the members of the late administration, invited by your committee, read a memoir on the dangers of the operation, which he had offered at the commencement of November, 1785, to the president of the council of finances, who refused to receive it. Your committee regarded this memoir as containing in clear form the most wholesome principles on the subject of the ratio. The striking predictions fulfilled by the event have led us to insert it in the report to the National Assembly; besides which, it contains a discussion of detail which makes a clear presentation of the matter.

* This assumes the use of all the tolerance, as foreigners do in estimating the Coins of their neighbors. But in fact the limits of the tolerance are not always reached.

OBSERVATIONS ON THE MONETARY OPERATION OF 30TH OCTOBER, 1785.*

Gold and Silver are produced from the mines every year, about in the relation of 54 to 55 thousand marcs of the former to 15 to 16 hundred thousand marcs of the latter. This would seem at the first glance to establish between them the exchange ratio of 1 to 24. But this is by no means the case, and it is remarkable that among the Romans, according to the opinion of the learned, the relation was 1 to 10. It maintained itself at this rate for a long time in China, when the Europeans raised it to 12 by their trade in Silver. It was 10 under the first race of our kings, 11 under the reign of Pepin, and by the ordinance of Pistes in 854 it was fixed at 11½.

In 1641 in Germany and Milan the proportion was no higher than 12; in Holland and in the Low Countries, 12½; in England, 13⅛; in Spain, 13⅓; in France, 13⅞, and this was the highest ratio in Europe.

In ancient times Gold must therefore necessarily have been comparatively more abundant than Silver in the mines that were worked; but it is still more certain that this revolution has been the effect of the spirit of trade in Europe.

Two peoples have almost exclusively the proprietorship of productive mines. The Portuguese, who have only Gold, and among whom Gold is the merchandise of exchange, have given it a high value in comparison with Silver, of which they have no mines. The Spaniards, who have more Silver than Gold, had an interest in increasing its value rather than that of Gold. They have done so at different times; and seeing the two metals equally fly from their country, they have thought it best to fix Gold there, and to give it a higher valuation. Their course on this subject has varied, as their systems of administration have done, because they have not yet been able to make up their minds to learn that in the end the metals belong to those who labor for them.

In the presence of these divergencies, nations that were without mines have been compelled to direct their combinations with reference to the surest way to foster the consumption of their products in preference to others in the countries which owned the mines, by giving them an advantage in payment.

The vicinity of Spain, the extent of its colonies and their population, the abundance of its Silver mines, have determined France to attract its Silver in preference to its Gold, according to it a higher degree of relative value in the exchange of its Coins, and after various changes the ratio had been fixed at 1 to $14\frac{5}{11}$. This policy was wise, because Silver is more susceptible of division, for that reason finds more to prevent a rise of the price of commodities, and is in some sort the natural Money of domestic trade.

* November, 1785. The author of these observations was Noel François Matthew Angot Desrotours. (B. 1739, d. 1821.)—H.

This was, besides, in conformity with the circumstances of France, where foreign specie is no longer current, as it is in other States, and where payment by adjustment or by paper Money are less accredited; where, for various causes, the obstructions of the circulation are more frequent, the alarms of confidence more keen and better justified by experience. The interests of the commerce of the Levant, of Asia, of Africa, where Silver is carried, and where Silver is rated comparatively higher than Gold, had its influence on this determination. And, finally, France, always a creditor in time of peace, with fewer revolutions of credit or of bad management, seemed to have less need of Gold, which is the Money peculiarly adapted to foreign commerce, on account of the ease of transporting it.

In England, as in almost all the other States in Europe, large payments are made by consent in foreign specie. There are many banks which facilitate payment by transfer in the three kingdoms; the influence, therefore, of the ratio of the two metals is less sensibly felt. England has habitually to export large quantities of Gold, in time of peace as well as in time of war, on account of the nature of her trade, of the extent of her provision for the equipment of her navy, and on account of her political interests, or those of the reigning family; Gold is therefore more convenient for her. It is equally convenient for deposit in her banks. Finally, her relations with Portugal, which makes its payments in Gold alone and in which the commercial treaty of 1704 has long assured her great and exclusive privileges, have also concurred with effect in counseling her to give a higher degree of relative value to Gold.

Nevertheless, England, at different times, has lowered her ratio, not by a fiscal recoinage, injurious alike to credit and contrary to good faith, but by lowering the value of the guinea. The last adjustment was in 1717 at 21 shillings sterling to the guinea, instead of 21 shillings and 6 pence. The illustrious Newton, then Inspector-General of the Mint, proved, in his printed report to the Lords of the Treasury, that the scarcity of Silver arose from the ratio being too high; but he nevertheless advised against a change,* for fear of injuriously affecting both domestic and foreign credit, being of opinion, furthermore, that the scarcity of Silver would cause that metal to increase in price, and that in the unchecked flow of foreign specie, a remedy would be found. Parliament, impressed by the dearth of Silver, lowered the price current of the guinea to 21 shillings sterling, at which it has remained, and which fixed the ratio at 1 to $15\frac{15}{67}$.

In 1753, Mr. Magens, a very able man, brought out a learned little work on Money, in which he showed that the English ratio of Gold was too high; that the scarcity of Silver would have required that the price of the guinea should be lowered to 20 shillings 6 pence sterling, that is to say, 2½ per cent.; but, for the same reasons as given by Newton, he advised taking no action in the matter, adding that Gold appeared to

*See Page 319 for correction of this statement.—H.

him to be preferable because better adapted for shipment to foreign countries, and to save the nation in such cases from the disadvantages of exchange.

One of the objects of the Bank is to preserve the equilibrium of the precious metals during those periods when the requirements of commerce cause a heavy drain for foreign export. We are far from being thus called for.

The sagacious Dutch, who carry on the business of resales; who manufacture Gold ducats under the law of the Empire for the whole of Germany; who have made themselves the arbiters of exchange in Europe, have invariably kept and will continue to retain their ratio of 1 to $14\frac{2}{61}\frac{3}{7}$, which was therefore a little lower than that of France, where the ratio, after reducing the fractions, was 1 to $14\frac{2}{61}\frac{3}{7}$. But in spite of this, Holland has retained her Gold, while France complains of having lost hers by reason of the low ratio.

The true explanation lies in the fact that in every country the abundance or the scarcity of the precious metals is to be traced to a cause far beyond and above that of the ratios between Gold and Silver, viz, to the balance of trade.

It is true that the ratio may bring about a temporary market rate of exchange which, however, regulates and corrects itself, and which, doubtless, at times operates to cut down the profits growing out of a favorable balance of trade, but never to destroy its preponderating influence. The balance of trade has certainly been unfavorable to France during two full years past from the fact alone of her governmental policy.

In the first place the Government deemed it advisable to cause a great quantity of Silver to appear in circulation in order to facilitate loans. By means of forced measures and of premiums* paid for bullion, ruinous to the King, and even more so to the commerce of the nation, nearly all the Spanish dollars which had come to the country since the peace were monopolized. Hence France was made a debtor to foreigners to the extent of the share of these Spanish dollars which belonged to them.

Secondly, France had taken but little part since the peace in the commerce of her colonies, and was not able to pay this debt by exchange drawn on the consumers of sugar and coffee.

Thus by the union of these two causes, and further by reason of the facilities accorded to the importation of everything coming from England without equivalent, exchange during two whole years past has been ruinous for France, to such an extent that it would not be impossible to prove a loss of eighteen millions to the State on one hundred mill-

*The French word in the original is *surachats*, for which there is no exact English equivalent. The *surachat* was a premium in the nature of a commission paid to private individuals on sales by them of bullion to the mint. It seems to have operated as a monopoly in favor of privileged persons.—(*Translator's note.*)

ions of foreign trade. As in the end payment becomes imperative, it is not surprising that some of our Gold has gone from us.

The immense quantity of guineas which went forth from the vaults of the banks at London during the last war, and which must with prudent forethought be replaced on the return of peace, and the small amount of Gold which has arrived from Bengal owing to the English expenditures in India, have both combined to still further favor this payment in louis d'ors.*

But, after all, we either owe or we do not owe. If we are in debt, we have made our payments at a profit, since our marc in louis d'ors is intrinsically worth 11 livres less than the marc in guineas, while the popular current rate in London has enabled the former to circulate at the same price as the latter, viz, at 21 shillings sterling. This Gold had come to us by the balance of trade in spite of the low ratio; we have resold it at a higher price while reducing our debt, and this is a great advantage. Finally, if we remain debtors, the new louis will follow the old ones, and will be rated by our English creditors according to the weight and Standard of the Coin. The loss will fall upon the French debtors just as it falls upon Spaniards who are debtors to ourselves, notwithstanding the differences between the Governments in Standards and ratios. If we do not remain debtors, it is clear that the English and all the others would run into debt to us by their speculation; that, inevitably, they would repay us with interest, either in money or in commodities, or in credits on other countries. It is thus demonstrated that the change in the ratio was an operation at least entirely useless in itself. This is not all: it was pretended to be to the advantage of trade while in fact it is ruinous in this respect. Let us proceed to the proof, for nothing is so physically within the domain of calculation as Money.

Let us suppose a marc of Gold of the Standard of the louis piece, $21\frac{23}{33}$ carats fine, to be brought to be exchanged. This amount would consequently contain 4,164 grains in weight of pure Gold. It would be paid for in new money at 748 livres 15 sous 2 deniers, and this sum in coin would in reality contain but 4,059 grains of pure Gold.

The King would therefore realize a profit to the extent of the actual loss to the owner of 105 grains of pure Gold, or, in other words, of $2\frac{1}{2}$ per cent., without counting as a loss the cost of coining.

On the other hand, according to the Schedule of 1771, the owner would have received in coined Money 709 livres only; but this amount would actually have contained in louis d'ors, 4.100 grains weight of pure Gold. Thus the loss to the owner would have been but 64 grains of fine Gold, or $1\frac{1}{4}$ per cent., without reckoning as a loss the expenses of coining.

No one can be ignorant of the fact that commerce at the end of the eighteenth century calculates only the actual weight of pure Gold or of

* Proof positive that the pretended present scarcity of Gold is but temporary, is given by the fact that a very small reduction from the seigniorage, granted by M. Turgot, caused 1,200,000 francs in guineas to flow monthly into the mint at Paris. M. Necker revoked the reduction and the flow of Gold stopped.

pure Silver, which it receives at the mint in exchange for bullion taken there; that in proportion as the amount retained of fine metal is large, it is necessary to sell at a higher price; that high prices deter purchasers; that the foreigner who might be disposed to leave for a time his Gold in France, to withdraw it as needed, would be less inclined to do so, because of the diminution he would suffer in the amount. These political axioms are understood by persons of the smallest arithmetical abilities. This unfortunate result, most injurious to the prosperity of the State, is owing to the seigniorage, which was only 8 livres 10 sous on Gold under the rate of 1771, but which is now 17 livres on the new Coinage, not including the cost of mintage.

There is, therefore, the best of evidence that with one hand we have taken away from foreign trade what we proclaimed to have given it with the other; and, as a final result, we have driven away foreign Gold without attracting Silver; and that our declaration presents an obvious contradiction between the object sought to be attained and the state of things which this declaration prescribes.

The public is therefore compelled to recognize that our fiscal policy is alone responsible for this operation—a policy disastrous by its consequences, and alike alarming to foreigners and to the French people, and which cannot but lower the political standing of our State, when it is seen that in the midst of profound peace, which should be a time of quiet and order, the banners are raised for a recoinage for revenue, a thing proscribed for sixty years past, as well in the interest of the King as in that of his subjects, if, indeed, in honor and in conscience* these interests can ever be separated.

The provisions of this fiscal scheme will furthermore be eluded, as has always happened on like occasions, by the cupidity of the dealers in base Money and of counterfeiters, who will be tempted by this doubling of the seigniorage. Counterfeits will be the easier because of the very bad workmanship shown in the new coinage, for lack of proper measures to secure a better result; the small quantity struck off at the mint for the coinage of medals being nothing more than a parade intended for the Court. As soon as the coinage shall have been counterfeited, heaven only knows at what falseness of standard such counterfeits may be made, and at what loss to the kingdom! An abridged collection of the facts which came to pass between 1689 and 1726, is thus presented to us. These considerations deserve the most serious and the promptest attention on the part of the Government. The only palliative remedy would be to advance the price of the marc in old

*Does it not seem like presuming upon the credulity of the people, and compromising the royal majesty, to announce that the public is to share in the gain of a recoinage, of which the sole object is to subtract from the people 6 gros and 48 grains of Gold on every four marcs that are brought to the mint? For the transaction consists in saying: I will return you for these 4 marcs only 3 marcs 7 ounces 1 gros 24 grains; but you will say that you are richer, although you have about 7 gros less of the same Gold.

louis to 757 livres, instead of 748 livres 15 sous 2 deniers; in that case, the seigniorage would be reduced to the same level as formerly; the reform in the ratio would then appear to have been the one object in view, either rightfully or wrongfully. Such a measure would be the more just in that a large number of louis, without being effaced in the impression, have become reduced in weight in excess of the 20 sous allowed—a fact which goes to increase the dissatisfaction of the people who have been deceived by the terms of the language used.

The nation, it is true, should understand its own tongue; but the stamp upon the Coin which is called in, being yet very distinct and durable, does it not seem hard, and perhaps unjust, to compel the public to stand the gain to the King of 12 grains on the weight of the old marc when delivered, and to receive in payment a new coinage which, on first coming from the scales, shows a further loss to the like extent in weight and to the profit of the King? So that, besides the seigniorage, the King makes two profits of 12 grains each, and the people suffer two losses of 12 grains in weight each. And this is equal to 4 livres and 11 sous to the marc.

No doubt, this reduction in weight of the coin is a necessary concession to the imperfection of the art of coinage, and to expedite the work in hand; but in a recoinage, which is not absolutely necessitated by the wearing out of the old Coins, it would seem that strict justice would require that the public should be indemnified in the price paid for the metal.

By this palliative act of justice, the operation would be restricted to the single object of a change in the proportional ratio, of which, it is apparent, the country will repent very soon; for this change can have no other effect in France than to cause payments from abroad to be made in Gold in preference to Silver. But no real advantage will be found in this if we recall the motives which had determined the low ratio and add to these the following considerations:

First. We move suddenly to an extreme, and extremes bring about crises, revolutions. Experience teaches that in monetary matters and in trade such revulsions work to the detriment of those who are responsible for them, at least by the disquietude that is produced.

All Europe is an association for the purposes of credit; to pass at a bound over so great a distance as that between the old and the new ratios is to give a severe shock to this system of credit and to derange all calculations and combinations respecting payments to such a country as France; for the par of exchange is reckoned on the average between the par of Gold and the par of Sviler. There must be no mistake on this point. But that will adjust itself, it is hoped, if we behave ourselves. But why is it not better to have nothing that needs to be set right? Half a century had scarcely sufficed to re-establish the honesty of our monetary principles. Who can foresee the consequences of this relapse?

Second. We shall lose on the trade in Gold jewelry and gilt articles;

for the foreigner formerly perceived two reasons for giving us the preference—the workmanship, possibly, and then a certain advantage in the price of the principal material, which induced him to submit to the gov ernmental right of imposing the Standard stamp.

Third. We should have turned our attention chiefly to those nations who own the mines, to favor their giving us the preference in their purchases.

Yet the attempt would not succeed, even if the double seigniorage should be made right. Figures will prove this.

The ratio of the Portuguese is as 1 to $15\frac{79}{99}$; that is to say, a little more than $\frac{3}{4}$. We place ourselves at $15\frac{1}{2}$, and the English are at $15\frac{1}{4}$.

But we should not have the preference even with this, because England takes no seigniorage. That imposed upon our new coinage exceeds this $\frac{1}{4}$, by which our new ratio is higher than the English, as we have already shown; and in rectifying the excess of our seigniorage by one-half, we should scarcely bring ourselves upon an equality with England, since the King would still take $1\frac{1}{4}$ per cent. for seigniorage, while this tax is not imposed in that country.

The ratio in Spain has changed repeatedly. In 1730 it was 1 to 16; from that period to 1772 it varied to $14\frac{41}{45}$; then, following upon faulty coinage of Gold pistoles in 1772, which was issued under the new rate, notwithstanding the promise given in 1775 (perhaps improperly) to the Spanish ambassador, not to give publicity to it, upon his assurance that the matter would be set right, the ratio stood at $15\frac{23}{41}$; finally, under the schedule of 1779, it was fixed at 16, and very probably an examination of the Standards would show but little uniformity in respect to the actual ratio. However this may be, we should not be justified in relying upon the Spanish ratio and its mutations for the discovery of the principles to guide a State which, like our own, is a seller and a creditor. And the consequences will be the same as under the ratio of Portugal, in respect to our trade with Spain and our settlements in Gold. But, further, as it appears that Spain has more millions of Silver to distribute than of Gold, it is evident that we are giving to England an attraction for this Silver of Spain in preference to ourselves, while we shall only be on an equality as to her Gold. This is the precise opposite to the former state of things, and it is impossible to look upon this proceeding as a politic one, still less as a matter of indifference, in its bearing upon the prosperity of this kingdom.

The proof is found in a very simple calculation. If a Spaniard desires to pay in England for commodities of the value of one marc of fine Gold, he will realize a saving of three-quarters of a marc of fine Silver by making his payment there in Silver; for the English ratio is lower by the value of these three-quarters than that of his own country.

But if he has to make this payment in France, he would find it a trifle to his advantage to pay in Gold rather than in Silver, by choice, because the ratio here is $15\frac{1}{2}$, whereas, before our change, the Spaniard

would have profited by a marc and a half of fine Silver in making his payment in the latter metal, while England gave him but three-fourths of a marc of fine Silver as profit upon the value of a marc in fine Gold; for which reason it was to the Spaniard's interest to make his purchases in France.

It was this which we desired to prove; and thus we behold the results of the ratio of $14\frac{5}{11\,9}$ [*sic*] and of our new one of 15½.

Since 1726, France has coined in the neighborhood of 1,500 millions in Silver, and 970 millions in Gold; from which it appears that the balance of trade caused a flow of Gold into our country in a relative proportion equal to, if not exceeding, that of the production of this metal from the mines, and because we have used a great deal of it in the arts and in ornaments.

The trade in cattle and sheep alone, and the business of fairs, keep in use at least 400 millions, which do not circulate in Paris. The Money reserves of every thrifty and well-to-do family in the provinces are kept in Gold from choice.

We have therefore not lost as much of it as has been supposed. Revive your commerce, and Gold will pour in promptly. Above all, let us not forget that a people skilled in commerce are always particularly partial to the yellow metal because of its being easy of carriage.

But, it is said, the goldsmiths have melted down a good deal of it. Well, the mint is a paying manufactory in France. What would be said of a manufacturer of cloth who should find fault that two many coats were worn?

A jeweler melts down sixteen louis to make them into a snuff-box which he sells at twenty-five. He has put into circulation 600 idle livres; or, in other words, he has added to the value of the kingdom twenty-five louis in exchange for sixteen.

Moreover, the consumption in manufactures is limited and unequal. If, at a certain period, more Gold is used, at another there will be less needed, and the excess will flow back to the mint. It is therefore likely that we shall have to retrace our steps, and that soon, because of a new convulsion.

But the thing which is most to be feared, and against which the Government should be on its guard, is that some day advisers will come forward who will not fail to suggest a remedy by an operation on Silver and a recoinage of *écus*. It would be a patriotic and faithful service to the King to bring to the notice of His Majesty the ills which afflicted this kingdom owing to the recoinages toward the close of the reign of Louis XIV; that the principle of stability in the currency has been the cause, since 1726, of the advance in culture and of the prosperity of commerce and of credit; and finally, that the granting of rebates in the nature of premiums (*surachats*) to the sellers of bullion is the most onerous and unjust device as against the national commerce that it would be possible to employ, no matter upon what occasion.

If, in truth, the ratio was considered to be too low, we venture to say it would have been simpler and worthier of a great monarch, after mature deliberation and advisement both at home and abroad, to advance the value of the Gold louis to 25 livres.

And if we had the courage to admit an error and to rectify it, we should best show it by withdrawing the new louis, and by the above plan attaining the desired end, without disgrace and even with brilliant credit to ourselves. Such a measure would make the ratio $15\frac{5}{83}$, and would preserve to us the very important preference as regards Spanish Silver.

If nothing had yet been done, and if the matter were still in a situation to be debated, there would be another fitter and simpler course to be taken; but when confidence has been impaired, it is necessary and proper to accommodate ourselves to things as they are.*

The discussion of this important subject has revealed that all the errors which could have attached to a monetary operation were united in this disastrous one, as well in the governing principle as in the execution.

For intrinsically, and owing to the nature of the Coinage, the relation between Gold and Silver when coined is as 1 to $15\frac{70}{99}$, instead of 1 to $15\frac{4}{9}$; that the pretense was to give to Gold a greater desirableness relative to Silver; but that the effect has been to set on foot speculations to take from us a part of our Silver.

That, as a result of our operation, the industries of our people as regards Spain have necessarily suffered, while Spain finds it to her advantage to employ English workmen. In proof of which, let us suppose two pieces of cloth exactly alike in quality, the one French, the other English, for sale in the same market, the price of which in Gold shall be equivalent to 692 thirty-seconds of a karat. A Spaniard comes and has only Silver. The Frenchman reckons his piece of cloth, in that metal, at $4.053\frac{1}{4}$ grains of standard fineness; the Englishman calculates his at $3.990\frac{3}{4}$ grains—a difference of $62\frac{1}{2}$ grains of standard, which make 1 ounce 5 gros 64 grains in weight of fine Silver, equal to $1\frac{5}{16}$ per cent. Which of the two venders would deserve the preference of the Spanish purchaser, and which of the two would get it? From this calculation, which is within the comprehension of every one, results the undeniable maxim that an agricultural and hard-working State should regulate its currency according to measures the most fitted to secure to its people the greatest possible amount of employment from those communities which produce the precious metals, and not by following the constant changes and the illusory calculations which are made by these latter peoples for the retention of their treasures.

The territorial extent of France, her population, and the mode in which her manufactures are for the most part carried on, with small capital, indicate the need of preferring the metal which best adapts itself to division into small parts.

* The memorial of 1785 ends here.

Spain possesses ten to twelve times more Silver in her mines than Gold; she borders on our frontiers; her ports are almost contiguous to ours; our connections, our common interests in political dispositions, our habits, our established factories, all these give us reasons for preferring her trade to any other. Consequently it behooves us, more than any of our neighbors, to facilitate the payment of the balance which we may derive from this trade.

Your committee, in summing up so many cumulative reasons, are unanimously of opinion that it is not advantageous to the interests of the nation to permit a ratio to continue unfavorable as it is to the business of our people with Spain, and of which the effect has contributed to the loss of our Silver, and the only real object of which was a blind fiscal scheme.

We do not wish to deny that other incidental causes have concurred in the result; but these concurrent causes will cease, and by so much the sooner as the principal cause shall be the more quickly removed. Finally this latter would still exist after the others had disappeared, and would prevent you from justly estimating the diminution of these less important causes.

The second subdivision of our inquiry was to determine what ratio should be substituted for that of 1785.

The discussion of the first proposition has established that the regulation of our ratio should have for its chief basis to increase the inducements which the possessors of mines of precious metals might find to purchase and pay for our commodities in preference to those of other agricultural and industrial peoples.

Now there are two nations that gather unequally the harvest of Gold and Silver. Portugal has nothing but Gold; Spain gets out ten to twelve times more Silver than Gold, and the total of her product of Silver exceeds the total of the Portuguese product of Gold. Therefore our interest impels us to give the decided preference to Silver. Nevertheless, this would not be a valid reason for emphasizing this preference by excessive means, such as adopting the lowest ratio in Europe.

We should strive to attract Silver without repelling Gold. Although the English dominion in the East Indies has been the means of drawing, and, while it lasts, will continue to draw, to Europe sums in Gold sufficiently large to render that metal by degrees more common, and to cause a fall in its relative value, still the dictates of prudence enjoin the avoidance of every extreme. For there are secondary considerations which must concur to establish the relation between Gold and Silver.

It is in part owing to the outlays which are made by France and England in the rest of Europe that the precious metals from America pass to the peoples who occupy the interior of the European territory, or who have no direct intercourse with the proprietors of the mines; and each of these States has a ratio fixed according to its prejudices, its local convenience, and its commercial jealousies.

These differences in the ratios bring about a like divergence in the computation and settlement of the actual exchanges which we need to make with these States. If our ratio should differ too much from theirs, we might give them too marked an advantage in our respective exchanges—pay too high relatively for the commodities they would sell us, and sell them our products at a price relatively too low.

Furthermore, this variety in ratios gives rise to mercantile speculations, which are commonly known as *traffic in exchange*, and of which the product of gain, limited, it is true, to a trifle beyond the interest on the Money employed, will not fail to cause perceptible and repeated outflows, if we depart in too marked a degree from the ratios of the others. And this is what has happened since the unfortunate recoinage of 1785.

No doubt this foreign traffic will never be able to deplete us entirely; for it cannot be otherwise than that a loss of precious metals should be replaced by a gain in kind, or at least that the loss should be compensated for by commodities that we should consume. But, nevertheless, it is in the power of this trade either to diminish the balance in our favor or to augment a loss such as we might temporarily suffer, as at the present time.

Finally, these speculative operations, carried on chiefly by communities among whom money is to be had at 2½ per cent., are capable of maintaining the low rate of exchange* which weighs upon the whole volume of your commerce, a rate causing a loss which can only be stopped by exporting specie or bullion in payment. But in such case, if one of the metals is valued relatively too high, the payment will be attended with actual loss, or there will be a disproportionate drain of that metal which is relatively undervalued.

We should also remark that Gold being naturally the metal the most convenient and the least expensive to export, it would not do for a State like France to rate it relatively much lower than the other nations.

The celebrated Dutot thought that the ratio should be based on $14\frac{5}{7}$. Your committee have valued it at $14\frac{7}{9}$, which approaches near to the ratio of 1785, and occupies a middle ground between this latter and the formerly existing ratio.

The point is in noting the various ratios adhered to in Germany, in Italy, and in the North, to find the proportional mean.

The ratio in England is as ..... 1 to $15\frac{5}{8}$
The ratio in Holland is as ..... 1 to $14\frac{33}{71}$
The ratio at Geneva is as ..... 1 to $14\frac{71}{100}$
The ratio at Venice is as ..... 1 to $14\frac{85}{100}$
The ratio at Genoa is as ..... 1 to $14\frac{91}{100}$
The ratio in Tuscany is as ..... 1 to $14\frac{51}{100}$
The ratio in Austria is as ..... 1 to $14\frac{16}{100}$ †
The ratio in Saxony is as ..... 1 to $14\frac{77}{100}$
The ratio in Flanders is as ..... 1 to $14\frac{51}{100}$

According to the tables of Paucton.

I. e., on France.—(TRANSLATOR.)

†The popular price-current has forced it up to $14\frac{55}{100}$.

Among the ratios in Germany, that of Austria is the lowest, viz. 1 to $14\frac{16}{100}$; that of Saxony is the highest, 1 to $14\frac{77}{100}$. The lowest in Italy is that of Tuscany, 1 to $14\frac{51}{100}$; and the highest that of Genoa, 1 to $14\frac{91}{100}$. These neighboring States do not act injuriously upon one another, since they preserve their ratios; and it has seemed to your committee that France in establishing hers between these extremes would be adopting the one most suitable to her condition.

We have proposed 1 to $14\frac{7}{9}$, and there does not seem to be any drawback to this rate, inasmuch as it would retain all the advantages we have had with Spain compared to England; it would bring us nearer to that of Portugal than our old ratio of 1 to $14\frac{21}{46}$ intrinsically; it is very close to that of Saxony, which is a flourishing country; and less high than that of Genoa, one of the chief seats of exchange with Italy.

Other and weightier reasons, which will be developed in the examination of the two subdivisions of our subject which follow, have finally decided your committee in favor of this relative proportion. But to anticipate the proper course of thought would be to risk confusion.

The third subdivision of the discussion in respect to the ratio between the Gold and Silver Coin turns on the propriety of declaring invariable the ratio proved to be the best, and on the method of reaching this result.

It is a self-evident truth that the rate of exchange between gold and silver, considered as commodities, is the effect of a commercial convention, and depends upon the necessities of the time being, which themselves spring from causes almost infinite in variety.

The quantity of the metals extracted from the mines; peace or war; the expenditures of a great State outside of its own borders; the periods of the great fairs in Europe; of the gathering of the silk crop; conquests; wars and revolutions in Asia, where Gold is relatively more abundant than in Europe, and less esteemed than Silver; all these produce continual changes in the relative abundance of the metals, and consequently in the conditions of their relative exchangeable value. England within the past few years has imported from Asia into Europe more than 200 millions in Gold.

There is therefore a physical impossibility and a perpetual contradiction between the fact and the law which fixes equally at the same time the price of the two coined metals according to an invariable rule. The essence of the things is unalterable, and the quality of Money cannot absolutely strip Gold and Silver of their nature as commodities. The most profound thinkers, such as Locke, Newton, Law, as well as Magens and Dutot among ourselves—in short, the best thinkers of all countries—have been unanimously of opinion; that it was sufficient to fix unchangeably the price of one of the money-metals; that the other coined metal should have a customary price-current or rate of exchange regulated according to general agreement and the relative needs of the community, and should be a coinage of determinate weight, size, and

standard, but legally subject to a further margin of alloy which would raise or lower its price little by little, according to the needs of trade, which alone is capable of judging with certainty when such needs arise.

Your committee in carefully examining these principles have been the more deeply impressed by them inasmuch as the example of Holland is entitled to great weight in these considerations, and in that country the rate of Gold only is fixed with a right of alloy to the extent of 3 to 7 per cent. This system is by so much the more essential to be followed in France, in that we, with less of the genius and spirit of commerce, are, unlike the English, without a bank whose interest it is to maintain the value of the precious metals in a normal state which shall not exceed certain limits of fluctuation—a bank which by its capital is in condition to prevent all serious speculation on the part of the gamblers in the rise and fall of these metals. Freedom of action will of itself fulfill this important function if we do not ignore the extent of its resources.

But a higher consideration has chiefly determined your committee in favor of this measure, viz, the fact that notwithstanding the law which prohibits it, Gold Coin frequently acquires in trade a higher value than the rate assigned to it; and such value depends upon circumstances. Necessity forces the gates of a law which cannot be executed; and this is nothing short of a serious moral ill. But in adopting the Dutch method, your committee have not thought it their duty to follow the preference which Holland has given to Gold to establish its fixedness, and to make it serve as the invariable term in the comparison.

Gold, by being more easily transportable, and at less expense than Silver, is, on that account, more variable in the march of commerce, and dependent upon causes which render the yellow metal scarce or plenty; wherefore Silver appears to be rightfully entitled to be considered, in France, as the invariable term of comparison. The écu (dollar) and its subdivisions should not be subjected in this relative comparison to the vicissitudes of a popular current rate, and could not be so subjected without the greatest danger to the stability of the par of exchange, and from the encouragement of the manufacture of base coins by which the credulity of a simple and ignorant people has been but too sorely abused in order to subtract from them their wealth, real and intrinsic. Gold Money, on the other hand, is of high value, without small subdivisions, and very much less in quantity. Let us add that Gold is not the Money of the people and of the poor—of those, in a word, who ought to be the prime object of solicitude on the part of their legislators.

To the Gold Currency, therefore, it would seem fit to attach an ordinary and legal current rate for the purposes of retail trade; but reserving a margin for reducing the Standard, the limit of which should be left to the determination of commercial needs, for the reason that trade alone is able to fix such margin of fluctuation by understanding the operating causes.

Liberty will preserve the common level. The State will be relieved from the disquietude and anxiety in which it has been continually kept by the greed of speculators interested in taking advantage of the smallest accidental differences in the relative values of the precious metals, whether from the vicissitudes of commerce or from the sectional and arbitrary regulations of neighboring princes and countries. We shall see no more of these disastrous recoinages, where the pretense of obeying the behests of trade has given the pretext by which the business community have been ground under the heel of treasury extortion, by which specie has been debased, or fictitious values substituted for an actual weight of fine bullion of which the people have been robbed in order that they should be the gainers! And, finally, the wisdom of a single day will, in the eyes of Europe, repair the errors and efface the shame of the past.

According to the above principle, your committee recommend the enactment of the following provisions of law:

Whereas the Gold coinage of 1785 has raised the value of louis d'ors beyond their intrinsic worth and their proportional rate in the markets of Europe, by which means damaging speculations have been abetted, whereof the object has been the extraction of Silver Money from the Kingdom:

Now, therefore, the National Assembly decrees that, in future, there shall be assigned in France to Gold Coins a rate at and below which such Coins cannot be refused by the creditor; which rate may be advanced by degrees only as required by the wants of trade.

This would seem to be the place to suggest the mode of applying this principle; but your committee reserve to themselves the further duty of presenting to you the details of this subject when the remaining monetary principles shall have been passed upon, so that the train of thought shall not be interrupted.

The fourth subject for examination which your committee propose to take up in the course of their labors is to determine the quantity and the quality which should enter into the composition of the principal part of each kind of metal intended to be converted into Money.

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[The passages here omitted, pp. 33. 37, relate to the Silver change and Copper tokens.]

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[DISCUSSION OF THE POLICY OF SEIGNIORAGE AND OF A MINT-CHARGE AND ARGUMENT IN FAVOR OF GRATUITOUS COINAGE.]

After having given attention to the standard and to the weights of coins, to their ratio to each other. to the kind of coins suitable for general circulation, and to the denominations which should attach to them, your committee have been led in the natural order of their labors to the inquiry whether the expressed value as borne by such coins should be simply numerical, or, on the other hand, should be ideal; in other

words, whether such face-value should include the cost of coinage, either with or without profit, or should exclude it, leaving such cost to be otherwise provided for as an item of general public expenditure.

Since 1726, and previous to that date, coined Money has been subjected to a tax or toll called *seigniorage*, and, besides, to the expenses of manufacture, to which were added charges in favor of the titular officers employed at the Mint, in the assay office, and in the direction and supervision of each workshop.

This right of seigniorage has been reduced from time to time in aid of trade; first to the extent of two deniers* on the livre, then of four, and finally of eight; and these reductions were, in 1771, included in the value of the marc as fixed by the schedule rate of that year. This rate reduced to 1⅛ per cent. the toll levied upon coinage, which was at that time much heavier on Gold than on Silver, and yet the King realized no profit therefrom, on account of the confusion in rates. The same mistake was made in 1785, the seigniorage on Gold being then raised to 2½ per cent., while that on Silver remained at 1⅛ per cent.; a fact which in itself was a contradiction of the alleged object, that being to favor the importation of Gold. A part of this tax is collected by lessening the weights and lowering the standard of the Coin, and part is paid in Money. And this explains the gradual degradation of the coinage for the purpose of obtaining a larger revenue at the expense of the public faith.

Yet the sovereign rarely derived any advantage from the transaction, and this sufficed to increase the evil; for, so long as Money was coined on the King's account and for a profit to him, the directing officials wisely prevented the debasing of the coinage and limited the seigniorage. But since favoritism, under the pretext of false needs for more Money in circulation, compelled the ministers to grant excessive premiums for Bullion—a condition of things which has lasted almost without interruption during peace and war since 1759—the privileged persons to whom the tax had been transferred have entered into collusion with the manufacturers at the Mint to squeeze, as it were, something out of the Coin product, and to come as near as possible to actual debasement. For it would have seemed like touching the sacred Ark of the Covenant, or like peering with profane eyes into the secret mysteries of Finance, if the officers of the Government themselves had strenuously sustained this abuse which weighed even more heavily upon commerce and the exchanges than upon the public finances.

Further, it has constantly been a matter of astonishment, and doubtless made habitually to appear in the public accounts, that the profits of the mints have always been stated at 500,000 livres annually.

During prosperous years, the coinage done without payment of premium on bullion (surachats) and exclusive of Money recoined, did not

* The denier was an old French coin, the twelfth part of a sou.—[TRANSLATOR'S NOTE.]

amount to more than 30 or 40 millions, which sum should certainly not have yielded a profit equal to 500,000 livres; and if we allow for the years in which premiums were paid on a part or on the whole of the metal purchased, it is probable that, taking fifty years together, the annual average would scarcely reach 250,000 livres.

Your committee, in view of these facts, do not hesitate unanimously to recommend the suppression of this impost of 1⅛ per cent. on the whole body of our debits and credits with foreign countries; a tax which is the author of all our monetary ills; a constant allurement to the cupidity of bullion sellers; a privilege the more dangerous in that it burdens with an unseen load the exchanges and the general operations of trade under the false semblance of a public service, although entirely illusory in the general and natural order of things.

The committee are also convinced that in a removal of this onerous tax will be found the only way to prevent the coins of the realm from falling below the legal standard, as it thus becomes possible to allow to the minter, instead of a remedy operating upon the substance, and thereby degrading the standard, the value of one grain of fine metal for each grain that is found at the trial of the pyx to be in excess in the fineness. This, indeed, would be the only method of continuing the coinage of our *écus* upon the present footing, without causing a difference between the new pieces and the old ones sufficient to tempt the greed of counterfeiters.

However desirable might be such a new order of things, there is yet another which might be still more earnestly wished for in the interest of public prosperity; one nobler and worthier of a great and loyal nation whose actions are henceforth to be determined and always and invariably guided by the greatest social welfare. This kingdom did at one time reap the fruits of such a policy under the directing care of Colbert, and it was one of the grandest monuments of his administration.* In 1679 the coinage was done at the State's expense; weight for weight was returned, and standard for standard. Historians have remarked, and among them Le Blanc, who is high authority in these matters, that forthwith there appeared in this realm a wealth of Gold and Silver such as had not been dreamed of before.

Here was, no doubt, the moving spring which raised our manufactures to so high a level of success; for all ends are considered in the plans of great men. This prosperity passed away when the principle of policy was abandoned and the recoinage of 1689 took place.

England, with her habitual sagacity, has the advantage of this admirable system; the coining of money being in that country honorably considered an item of public expense.

It is not that the levying of the costs of coinage is unjust, for the stamp upon our coins is the certificate to the world of their weight and fineness; and it is upon the faith of this stamp that our specie escapes being melted down into Bullion and passes current in all places. To a

* See page 712.

parsimonious economy, therefore, the remission of this toll may seem like an uncalled-for gift. Such an opinion might also be fortified by the assertion that the goldsmiths would oftener be tempted to melt our coins, and thus cause the nation unnecessary expenses. And, further, the loss must be looked upon as involving 500,000 to 600,000 livres.

We are willing to admit that these objections are in part true and are entitled to some weight. But we most stoutly maintain, in opposition thereto, that the par of exchange is reckoned on the actual amount of fine metal contained in our specie; that the *écu* (Silver dollar) is not exported until the loss in exchange exceeds 3 per cent. or thereabout; and that thenceforth, in case of a fall in exchange, it is apparent that the foreigner does not credit us in our purchases for anything on account of the cost of our coinage, while in remitting our *écus* in liquidation of his purchases from us, he compels us to take them at a rate which includes this cost; the result of which is that we pay more for what we buy and that we get less for what we sell by reason of the charges at the mint.

The casting and coining necessitates expenses and loss by waste to be borne by the party doing the work; and this is the excuse for the tax. The expense is certainly a matter to be considered, but there are productive expenditures which a well-ordered government should regard as benefits.

Premiums on the export of our merchandise have been among the wisest expedients which political management has been able to take advantage of; and the taking off of the duty of seigniorage and of the cost of coinage would be an absolute premium upon our foreign sales. That nation is rich which knows how to recompense its poorer citizens as an encouragement to augment the product of their toil. When was such encouragement more needed than now?

Perhaps, indeed, in ordinary times, in a period of prosperous credit, of brisk trade, your committee would have limited themselves to proposing to you the suppression of the right of seigniorage alone; but the evidences of penury on all sides and of the paralysis of credit, temporary though they may be, have determined us to commend to you a brilliant operation, courageous, worthy of a great nation—a policy resembling that of which the benign effects were felt in this kingdom a century ago. Each time that a partial removal of the duty of seigniorage has taken place since 1756 the circulation of Money has become freer; precious metals from foreign lands have flowed in a greater abundance into this realm; the exchanges have turned in our favor.

To-day the chief centers of trade, such as Bordeaux, Marseilles, Amiens, and Bayonne, call for the suppression of the seigniorage. We are justified in assuming that the same favorable results will follow as formerly, and these are precisely what we are now in need of, viz, an advance in our exchanges and a larger stock of the precious metals.

The formal announcement of fixity in the value and standard of our

Money—the confidence which will thereby be inspired through the whole of Europe, the respect thus shown by the nation to the great principles of trade and of public faith in the midst of drawbacks inseparable from a revolution, will be the prominent features of this reform.

We must rise to the height of the proposed enactment in order fairly to judge of it. That which would perhaps be extravagance in other circumstances, becomes, in the midst of a crisis like the present, an act of greatness and of most politic munificence.

Furthermore, a domestic consideration adds its weight to those operating from without. The National Assembly favors a currency of low-standard Silver; and this financial operation cannot be carried into execution without prohibiting the circulation of the present pieces of 6, of 12, and of 24 sols, now outstanding to an amount of nearly fifty millions, of which probably more than one-third in weight has been lost by wear. Does it not seem important to the wisdom and the humanity of the Assembly to make amends to the public for this unavoidable loss caused by time, which destroys everything, and to give to the people a good money coined at the expense of the public treasury? Government credit depends upon opinion, and can only be sustained by a policy calculated to win such good opinion and to exalt it.

Finally, a last consideration offers itself in support of our position. Everything is faulty in our monetary administration, even to the language employed. The technical obscurity which darkens the subject has come from the ancient custom of deriving a profit, more or less large, from the Coinage, which it became necessary to harmonize with a certain order of nomenclature, formerly more regarded than in recent times.

The intricate reckoning which had to be gone into to ascertain the weight of the royal Coins—that is to say, the King's toll levied upon all high-standard minted Money—came to be regarded as a formidable mystery. When attention was no longer paid to these symmetrical terms, the royal profit and the costs fixed certain relations between the metals, which may be considered under four different aspects:

1st. The numeric or fictitious ratio of Gold to coined Silver.

2d. The intrinsic ratio of Gold to coined Silver according as one metal may have been undervalued as compared with the other.

3d. The ratio of uncoined Silver to coined Gold and of Gold bullion to coined Silver.

4th and lastly. The ratio of the metals uncoined to one another being that which is fixed by the world's trade.

All these distinctions envelop the subject in such obscurity that it is rare, even among financiers and business men, to hear the least discussion raised without the fact becoming apparent that the confusion among these different ratios introduces as great confusion into the reasonings employed. This obscurity, these complications are necessarily taken into account in business.

Now, there is nothing of this in England. There the numeric and the intrinsic, as well as the ratio between the metals as natural products, are of necessity one and the same thing, because the specie is not subject to any duty, tax, or charge.

Hence all accounts are simplified, and book-keeping is not a mystery for either party to the account.

From this examination we are led unavoidably to the conclusion that the working operation of the mint will be rendered simpler, clearer, and more perfect in proportion as the minter shall be allowed to charge only for the number of marcs delivered to the public at the prescribed standards and authentically verified; and this simplicity of method will bring about results of economy otherwise unattainable.

All things must be united in this great movement; and if we desire the end, we must be willing to adopt the means.

The practical working of the plan would be simple in the last degree. The marc of coined Silver, of the standard of 10 deniers 21 grains, would continue to be worth 49 livres 16 sous; but there would be provided a margin of one grain in fineness in excess of the standard, so as to insure that the standard should never fall below the prescribed rate; and this one grain in fineness, representing 16 grains in weight of fine Silver, would be included as part of the costs of Coinage whenever necessary to make full weight.* Thus, by law, the marc would contain in weight 4,286 grains of pure Silver, instead of 4270.

The *écu* of 3 livres retaining its present dimensions and continuing to be worth 60 sous, but of a new Coinage, would contain $258\frac{192}{996}$ grains instead of $257\frac{228}{996}$ grains. The coined livre then would legally represent $86\frac{65}{996}$ grains in weight of fine Silver instead of $85\frac{740}{996}$ grains. Hence no further temptation to debasement, no variation in estimating the par of exchange in Money. The foreign debtor would simply pay us so many grains of fine metal as were contained in the number of livres owed by him, and the French debtor likewise a sum in grains of fine Silver representing the amount of his liability to his creditor. Such is the touchstone of a good monetary operation. No more general recoinages, no more trouble, no further anxiety; confidence and hope everywhere.

The value of metal uncoined would be, as in England, the same as of that coined; no further obscurity in the different expressions concerning the numeric and the intrinsic ratios.

Nevertheless your committee, who have set themselves scrupulously to the consideration of their subject from every point of view, and who have endeavored to answer and dispel all the objections offered, even those which seemed to rest upon false grounds, cannot avoid bringing to

Deniers and *grains* were terms of standard as well as measures of weight. Pure Silver was represented by 12 *deniers*, the denier containing 24 grains. Two hundred and eighty-eight grains in standard represented unalloyed Silver; and 1 grain standard being equal to 16 grains in weight gave the weight of the marc at 4,608 grains.—TRANSLATOR'S NOTE.

your notice one which has weight, and which must be considered as having an important bearing upon the public welfare.

The honorable *Députés du Commerce* have justly observed that the refined ingot employed by silversmiths and in manufactures in which Silver is used, as of galloon [lace: silver-lace], is a merchandise the price of which is necessarily scaled upon the money-value given to the grain standard of fineness employed in the Coinage; that in consequence of the remission of the tax and charges at the mint operating to raise the price of the metal unalterably to 3 sols $9\frac{207}{261}$ deniers, there would result an advance in price on one grain of standard equal to $\frac{243}{261}$ of a denier, which would bring the price of a marc of fine Silver up to 54 livres $19\frac{102}{261}$ sols instead of 53 livres 9 sols 2 deniers, according to the rate of 1771. And this amounts to an advance of 1 livre 10 sols in the price of this material which enters into two valuable manufactures, an advance equivalent to 3 per cent.

Your committee recognize the correctness of the calculation, but they desire to observe upon the consequences thereof:

1st. That on an ingot of 50 marcs, costing 2,750 livres at the price of 54 livres 19 sous, the labor and the workmanship employed upon it until it is converted into galloon or other textile adds at least 2,500 livres, and sometimes 1,000 *écus* and more, to the value; that, consequently, the addition to the purchasing-price of 75 livres on 50 marcs would bring the advance on the total product to only $1\frac{2}{5}$ per cent., an affair quite too insignificant to injure this manufacture of an article of luxury, so far as the foreigner is concerned, since we would estimate Silver at a price about equal to that of nearly all our neighbors when our ratio shall be reformed.

2d. That in this class of manufactures the handiwork goes for far more than the material, and is certainly the determining factor, since the metal itself is lost and dissipated in great part during the process of being worked up.

3d. That this one and very limited instance should scarcely be allowed much weight in the scale of the general interest; that the removal of the imposts on Coinage being equal to a premium of nearly 3 per cent. upon the export of all the commodities of the kingdom, the manufacture of galloon would share in this benefit with the others.

4th. That the same remarks would apply to the silversmith's trade; and should there be a rise in price for the domestic consumer, it would be so slight as not to counterbalance the loss to the circulation by the use of Silver in the manufacture of silver-ware.

5th. There is a decisive and well-known fact to be opposed to any doubt that might arise or be suggested as to the advantage to be gained by the suppression of the imposts levied at the mint.

Since 1726, following the earnest desire of the business community, the government has twice in succession lowered this duty, the reduction being in an aggregate amount equal to 8 deniers on the livre; that is

to say, to 3½ per cent. M. le Coulteux de la Norrais, deputy of commerce of the city of Paris, and M. de Gournai, intendant of commerce, two men certainly enlightened in the practical application of the principles as well as of the theory of exchanges and of trade, besides being men of probity, were the chief promoters of the first experiment. In 1768, the honorable deputies of commerce approved of the project, after being expressly consulted in relation thereto. The notorious effect was to raise the exchanges in our favor; to cause a great flow of Gold and Silver to the mints, such having always been, as it will invariably be, the result of a reduction of imposts and of burdens upon trade and its returns.

The first experiment led to the second, and these two successes left to the administration only the regret at not being able entirely to accomplish the object. We venture to affirm with certainty that the obstacle came less from the consideration of the public loss of revenue involved in the measure than from the intrigues and cupidity of those who might lay claim to the favor of *sur-achats;* in other words, of the enemies of trade and commerce. Twenty millions, gained in this way by favored individuals since 1726, have probably cost to general commerce, owing to depression in exchanges, 80 or 100 millions.

Hence a wrong judgment may have been formed by those who, not being cognizant of the facts, ascribed them to causes which did not exist. Certain persons have thought that the fall or the weakness in exchange during a condition of activity in our trade might be attributed to the higher price which the premiums (*sur-achats*) gave to bullion of the Standard of the Coinage.

The trouble did not come from this source, but in part from the exclusive monopoly granted on the price of the metal, which rendered all other business interests dependent upon the monopolist in the competition for the purchase of the precious metals in foreign lands, and partly because the monopolist, so long as he made his own profit, did not care in the least whether his purchases exceeded the quantity of bullion required in trade. If this amount was exceeded, it followed that exchange must fall to the general detriment of the public; but the monopolist came out indemnified, because of the profit which was assured to him.

The statements of the coinage at the mints during the years in which premiums (*sur-achats*) were paid, compared to the years when such was not the case, furnishes the solution of this problem. It is seen that, in 1784, the manufacture of Coin amounted to nearly 84 millions, whereas in the years when there were no *sur-achats* the coinage amounted to only 20 to 39 millions annually.

From 1763 to 1775, during all of which years *sur-achats* were paid, there were taken to the mint, on an average, 46 millions annually.

A premium of 2 deniers, granted generally to trade by M. Turgot, procured during two years the coinage of 39 millions one year with the other.

These comparisons suffice to make it evident that a special rise in the price of bullion of the standard of *écus* is a burden upon trade; that, on the contrary, a general rise in favor of commerce produces activity, because it facilitates quick sales, and no one has an interest to abuse it to his own injury. The fall in exchange stops short the reckless speculator, and there would be no privileged advantage to come to his aid. Upon a final examination, a pretended indecision in respect to the advantage or the disadvantage of the removal of the tax on mintage will be found to reduce itself to one consideration. This tax amounted in 1726 to 6⅔ per cent. In compliance with the earnest demand of the business community, about one-half or 3⅓ per cent. were remitted with advantage and with success. By what strange revulsion of ideas can it be thought, in 1790, that the remainder of the journey towards sound principles would be fraught with evil? Might it not be inferred from this odd contradiction that it would be an advantageous performance to reimpose upon the coinage these 3⅓ per cent. of which it had been relieved?

We must reach these bases of good sense and of evidence to appreciate at their worth all the petty sophistries supported by incomplete and inadequate calculations by which a great truth is attempted to be concealed, no matter with what object.

Your committee are certainly gratified to find their unanimous opinion sustained by the demands of cities like Bayonne, Marseilles, Amiens, and Bordeaux. But even if these places had not spoken, it would not have affected the truth of the enduring axiom that a remission of the tax on the coinage of Money is an encouragement to trade and commerce—a continuing bonus on the export of our commodities, and one that is thus cheaply attained. Never was so great a good secured at so small a cost.

Your committee, nevertheless, will not attempt to deny that this great measure will not produce at once the striking effect which attended the same policy in 1679, and this because of the changed condition of national affairs.

This report has called your attention to the facts that there is no balance of trade in our favor; that we continue largely to supply our needs by foreign purchases; that we are debtors to our neighbors by reason of their investments in our public funds, and shall remain so owing to the settlements to be consummated in the future. As a result, exchanges are against us even with Spain, from which we draw our supplies of the precious metals against our exportations of merchandise to that country. This is one of the evils growing out of the present crisis.

The readjustment of the ratio between Gold and Silver, of which your committee have demonstrated the urgent necessity, and the remission of the tax on coinage, are two powerful means which are presented to you for the removal of one of the causes which have contributed to this crisis, viz, the deficiency of specie in circulation.

The change in the ratio will increase the advantage that Spain would

have in the consumption of our products in preference to those of our rivals; for she has more Silver than Gold, and consequently she values her Gold more highly than her Silver, and at the present time she has an advantage, to the extent of 4 per cent., in making her payments in Gold rather than in Silver, and an inducement of $1\frac{5}{16}$ per cent. in favor of purchasing English commodities with her Silver in preference to our own. The restoration of the ratio will make it profitable to us to settle our annual debits in Gold rather than in Silver, while the latter metal is more useful in our circulation than Gold, which easily disappears from sight. And if you delay to restore to the metals the ratio of proportion between them which our interests and our position demand, it is clear that your Silver will be sent out in payment rather than your Gold which is concealed.

Your committee will present to you the details of the method the most suitable for putting the plan into operation as soon as the body of principles shall have been established by decree; but we have felt it our duty, for the sake of clearness, to submit these principles separately.

The removal of all tax upon coinage will improve the condition of our foreign trade, and, as a consequence, will infuse new life into the labors of the people. Whether the gain from this new condition shall enure to the profit of your own merchants, or to the advantage of your foreign customers, it is evident that a greater abundance of the precious metals will be brought into circulation.

Your committee have thus summed up the entirety of the plan, of which the minor points have been laid before you, in order that your attention may be fixed upon those matters which will be the most important in the deliberations you may have upon the subject. We think that we can congratulate ourselves at having united the consideration of the present grave exigencies of the State with the presentation of the only means available to restore order in our monetary system through a process at once clear, simple, unvarying, and indispensably necessary. The adoption and carrying out of this project in its full scope will cause confidence to revive both at home and abroad; it is the only one worthy of being presented to our legislators, since partial and temporary remedies would only aggravate the ill, and appear, as it were, to tolerate its existence, thus closing the door against the return of hope. Such is, in brief, the plan we offer to you, which embraces all that is needed, and in which the different propositions are related in object and sustain one another. It should be viewed in the light of the important considerations involved, and of the urgent needs of the circulation at this time.

We do not deny the possibility nor the probability that the inducement offered by the removal of the coinage-dues will cause a greater influx of the precious metals than the country is entitled to; and the fall in exchange will, on this account, experience certain momentary variations until the country shall have liquidated the balances in exported commodities.

Your committee foresee this result, and do not attempt to shroud it in mystery; but the object sought, viz, activity in the circulation, will none the less have been attained, and the impulse given to the labor of the people, necessarily following upon an improved condition of trade, will be your justification. For Spain does not carry on a trade with us in the precious metals; she exchanges her Gold and Silver for our productions, of which she is continually in need, and to which she will give a preference in her purchases as soon as we rate her Silver higher than our rivals do. At present the public treasury, in order to provide a precarious and insufficient coin-circulation, is compelled to buy bullion at a loss. This business, which is a necessity, does but aggravate the natural fall in the exchanges, and there does not seem to be any remedy as efficacious as the removal of all restrictions upon coinage. By this means the circulation would be replenished because of the renewed activity of labor. It would be a general *sur-achat* (premium on specie), and not one granted to individuals, such being always a load fastened upon advancing commerce; and the public treasury would be relieved from losses which it now suffers without even the satisfaction of knowing itself equal to the demands made upon it.

After having thus maturely weighed and combined all these nice distinctions, and realizing the necessity of novel legislation while perceiving the only method of making it worthy of the National Assembly; acting within the spirit and the object of your decree of the 8th of October last,* your committee propose to you the enactment of the following decree:

That, from henceforth, there shall not be levied any charges or imposts whatever upon the manufacture of the new Coins which shall be prescribed by the National Assembly; that the Committee on Currency shall be charged forthwith to present a scheme for a new coinage, and that as soon as the new pieces shall be struck the manufacture of the former coins shall cease entirely in all the mints.

Your committee are unanimously of opinion that it is desirable to give to the money of the national coinage as wide and general a circulation as possible, and to this end that each piece should bear upon its face the designation of the quantity of fine metal contained in it. This honest practice would inform our own people, and, in foreign lands, would protect travelers against imposition. If every nation would but conform to this measure the mystery of exchanges would be cleared up. The committee, therefore, recommend a decree as follows:

"That on each piece of Coin the stamp shall certify to the quantity of fine metal contained in the piece."

* This decree way as follows:

"The National Assembly decrees that the Committee on Coinage come to an immediate understanding with the Committee on Finances upon the various modes of remedying the scarcity of Coin, and especially upon the following:

"1. On the coinage of small change.

"2. On the facilities to be accorded to those who shall carry Gold or Silver Bullion to the Mints, of immediately receiving Coin without other reduction than the cost of coinage,

"3. On the plan of giving currency in the Kingdom to foreign Specie, at rates based upon their actual value, etc."—H.

Such constitutes the first part of the work of your committee, containing the fundamental principles, without which they would have no guide to conduct them in the second. As soon as these bases shall be fixed and established, all the details of a system the simplest, the most economical, the most intelligible, and the most efficacious, will quickly suggest themselves.

We may be permitted to make a few closing remarks to the effect that the existing state of things is such as cannot long continue or be endured; and to prolong it would be knowingly to deceive the nation; that any action toward lessening the value of the coinage would be an illusion damaging to our good faith, and of which the chimerical advantage would enfeeble the State by unsettling the prices of commodities and the value of wages, by the impoverishment of the public treasury and of private fortunes; that any general recoinage, other than gradual and continued, would be a public loss, useless and agitating, and one which the State has not the means to sustain; that there is but one narrow and difficult path leading to an improved monetary condition, of which your committee have carefully examined the entrance, the course, and the outlet. We confess before France and the whole of Europe our inability to discover any other way; but we would greet with patriotic gratitude the efforts of other and wiser citizens who should be able to consummate the work of financial restoration by happier expedients not less honest than those we have suggested.

NOTE.

It may be useful to subjoin here in connection with the recommendations of free and gratuitous coinage by the committee the following memoranda indicating the course of legislative action which simplified the management of the mint and established free coinage, and for a time secured gratuitous coinage: (See page 711.)

DECREE OF THE COUNCIL OF STATE, containing authorization to the Directors of Mints to receive plate which shall be freely carried to the mints. Of the 20th September, 1789.

PROCLAMATION OF THE KING for the execution of the articles XXI and XXII of the Decree of the National Assembly of the 6th October, 1789, relative to plate. Of the 12th October, 1789.

PROCLAMATION OF THE KING authorizing the committee of the district, of the city of Paris to receive jewelry of Gold and Silver in order to transmit it to the Director of the Mint. Of the 25th November, 1789.

LAW RELATIVE TO THE ORGANIZATION OF THE MINTS, ETC., GIVEN AT PARIS THE 27TH MAY, 1791.

Louis, by the grace of God and by the constitutional law of the State KING OF THE FRENCH, to all present and to come, GREETING. The National Assembly has decreed and we desire and ordain as follows:

Decree of the National Assembly of the 19th and 21st May, 1791.

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CHAPTER V.—*Of the Director.*

ARTICLE I. The Director of the Mint shall be compelled to receive on the basis of the published schedule rates, and in conformity to the decree of the National Assembly, national and foreign Specie which shall be brought to him, and ingots stamped in French mints.

LAW RELATIVE TO THE SMALL SILVER MONEY, DECREED THE 11TH OF JANUARY LAST, GIVEN AT PARIS THE 28TH JULY, 1791.

Decree of the National Assembly, 11th July, 1791.

ART. V. Every one who shall carry to the mint Silver bullion shall receive, without any deduction, the same quantity of grains fine of coined Money.

The decree of the 16 Vendémiaire, year II, and 26 Pluviôse, year II, established a coinage system based upon a unit called the *grave.*

LAW RELATIVE TO THE EXCHANGE OF GOLD AND SILVER AT THE MINT OF THE 28 THERMIDOR, YEAR III.

The National Convention, after having heard the report of its Committee of Finance, Section of Assignats and Coins, decrees as follows:

Persons who shall carry Gold and Silver to be exchanged at the mint shall receive the value of them in Silver or Gold Coins, in conformity to the law of the first month of the year II and of the 26 Pluviose of the same year.

Decree of the National Convention of 11th April, 1793, the second year of the French Republic.

* * * * * * *

ART. I. From and after the publication of this decree the sale of Coin of the Republic is forbidden in all the extent of the territory of France, or occupied by the French armies, under penalty of six years in irons to all persons who shall buy it or sell it.

II. No purchases, sales, négotiations, contracts, or transactions shall henceforth have any binding force unless they be in assignats; those who shall be convicted of having agreed to or proposed various prices, according to whether payment should be in Coin or in assignats, shall likewise be condemned to six years in irons; nevertheless, without forbidding those who have Coin to use it at par with assignats in their payments.

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In the name of the French Republic.

LAW RELATIVE TO THE FABRICATION OF COIN OF THE 8TH FRIMAIRE YEAR IV OF THE FRENCH REPUBLIC, ONE AND INDIVISIBLE.

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The Council of the Elders, after having declared urgency, adopts the following resolution:

ARTICLE I. The fabrication of Gold, Silver, and Copper Coin shall be pushed by all possible means. The management of the mint is specially charged to accelerate its operations under the direction of the director in charge.

II. Any citizen who may desire to convert Gold or Silver Bullion into Money may carry it to the mint; the real value of it shall be paid to him in the same metal, according to the fineness, without any deduction for cost of mintage, fees, etc.—H.

IV.

THE COINAGE SYSTEM PROPOSED BY MIRABEAU.

Upon the presentation to the National Assembly of the Report of the Committee on Coinage, Mirabeau distributed, at the session of December 12, 1790, to all his colleagues a tract entitled "Preliminary Observations on the First Report of the Committee of Coinage." This tract of 15 pages is furnished with as many pages of closely-printed notes. It was followed by his memoir on the Monetary Constitution, and by his bill establishing a system of Coinage. The entire work occupies some 110 pages.

The tract first mentioned is chiefly an attack, not wanting in savageness and personality, upon the work of the committee lately printed.

The work of the committee appeared to Mirabeau not only for the most part very useless, but, further, "a tissue of contradictions, of inexact definitions, and of false assertions, so that, in order to clear up what it desired to teach us, the committee has increased its obscurity."

Among the points to which he objects is the definition of the word *monnaie* (used in French to express "money," "coin," and sometimes "mint").

The committee having defined it as a "portion of metal to which the legislator gave a form, weight, imprint, and denomination," Mirabeau observes: "The writer of this definition lacks learning. In former times, there were moneys of copper, paste, bark of trees; to-day, shells are used as money in some countries. Lastly, the true definition of money is in the Roman law, and especially in Aristotle,* one of the profoundest political thinkers who have taught the human race. It is not worth while to search out a new definition in order to introduce another error into the world." He also objects to their talking about metals and coins themselves when in his view the organization of the mint, or rather the modes of Government control over Coinage, should be considered before anything else was decided. The cardinal objection, however, was one with which the world is strangely familiar.

"The committee," he says, "propose to admit Gold, Silver, and Copper for money. This proves that it has not reflected an instant on the doctrine of money or that it is in the toils of a most pusillanimous timidity."

It is amusing to observe that the great orator, or the person who wrote

* Mirabeau was in all probability speaking of Aristotle's definition of Money as a measure, a point which M. Chevalier and the Conference of 1867 strongly enforced. There is no evidence that Mirabeau was aware of Aristotle's notions concerning Legal Tender, nor that he appreciated the expressions of the Roman lawyers about Money in their relation to that point.

in his name here seemed to become aware that he was likely, on account of what he was about to say, to be regarded as one of those unpractical "system-makers" of which France was to have so ample an experience. He continues: "I beg the committee to read more carefully than it has done, although it quotes them, Locke, Harris, and the profound theorists upon this matter; it will see that I am not floating about in ideas (*systematiques*) of system-makers, and that I ally myself to the unanimous opinion of all the thinkers. But as this matter enters into my address, I shall say no more of it here."

He now comes to the famous question on the ratio of the metals, which he pronounces to be "a question, for the present, very useless, and which will be still more useless when it shall be settled that we are to have but one constitutional money." "But observe," he says, "how near your committee was to the truth; it had it under its hands and did not seize it." This supposed truth was the remark on page , concerning the balance of trade. "What!" says Mirabeau, "this truth appeared to the committee, and it did not draw from it the conclusion that the proportion between Gold and Silver was not a matter to be acted upon; that in this matter, as in so many others, it was necessary to leave their fluctuations to the chances of commerce. The committee did not rise from that truth to the fundamental principle, namely, that there should be but one kind of constitutional money, because money being a measure, ought to be equal in all its parts, and invariable, which it cannot be if you admit two metals for this measure."

It is evident to the reader that on the 12th of December, 1790, the mono-metallist campaign was opened in Paris. It is worth noting that in sowing this seed of discord between the metals, Mirabeau, the Silver mono-metallist, had no more thought than had Lord Liverpool, the Gold mono-metallist (see page 354), of introducing that discord between the nations which late years have known as the Monetary War, inaugurated by Germany, following the practice of England, and inspired by the successors of Mirabeau in France. On the contrary, Mirabeau is himself an apostle of "solidarity."

In opening his address on the "Monetary Constitution," he says:

"Gentlemen, I propose to explain to you the doctrine of Money as I understand it.

"The subject is extremely important. Not only the theory of monetary art is one of the first bases of financial science, that chief source of the prosperity of Empires, but it has intimate relations with the policy of all nations, which seem united by this common tie in order to show that races scattered over the globe can never cease to be a family of brothers, destined to love each other—to aid each other mutually in the enjoyment of the imprescriptible rights of their nature.

"An honest money is the sign of all that can be sold; but all that can be sold does not grow, is not produced in the same places.

"In the admirable combinations of His system, the Author of all that

exists has permitted the seas to separate the Nations; but he has forbidden that the seas should disunite them.

"And this sign is not only a commercial sign; beside providing them the means of maintaining the equilibrium between the Nations, it perfects these means; it holds them each in the limits which political law has established; it arrests or thrusts back the sanguinary arm of princes tormented by the love of false fame; it sharpens industry, it fertilizes wealth, it increases labor hundred-fold; with this sign resources, time, place, number, all are balanced (*tout se compense*).

"Anticipate from sound monetary doctrine a far greater influence when, united to liberty, this double torch shall enlighten all the nations concerning their true interests. Then will they recognize the practicability of an universal and common Money, which shall be dependent neither upon the fertility of the mines nor upon the avarice nor caprice of their possessors; then the too oft forgotten confraternity of the human race will be intertwined by a circulation, more friendly and more active, in all political and commercial relations; then may be said of the doctrine of money what the Roman orator said of the law: '*It is one, it is universal;* it is the same for Rome and for Athens; there is nothing to be added, nothing to be abridged; it has no need of commentary.' May we witness this happy epoch! And if an example be needed, may it be the Empire of the French that gives it! But to arrive at it, let us begin by simplifying our own monetary system."

I will here make no further quotation from this eloquent address, 50 pages in length, but will briefly set forth the scheme advanced by its famous author.

The coinage bill which Mirabeau proposed covers thirty octavo pages, the larger part of which space is devoted to the modes of control of Coinage. The points of his scheme were these:

"I. There shall be two kinds of monetary signs in France—constitutional Coin and additional signs.

"II. Silver shall be employed for the manufacture of constitutional Money, without, however, precluding the right of choosing another material more susceptible of division and of extension.

"III. Gold and Copper shall be used for the additional signs."

There was to be no seigniorage in the broad sense, but the cost of Coinage was to be taken out of the coin.

Gold pieces of 10, 20, and 50 *livres* were to be coined, but Mirabeau gives no clew to their intended weight; although their value was thus nominally given, there was to be no real tie between them and Silver, which was the only "measure;" and the Gold was to find its level in commerce as a trade Coin. It was substantially this system for which Berenger endeavored to obtain the support of the authorities in 1802 and 1803 (see page 725); with what lack of success will be seen in an examination of the report of Gaudin here following, as well as in the law of 1803, reprinted page 155.

V.

THE REPORT OF THE MINISTER OF FINANCES OF 1803—GAUDIN.

SELECTED EXTRACTS FROM THE SECOND REPORT OF THE MINISTER OF FINANCES* TO THE CONSULS OF THE REPUBLIC ON COINAGE.

CITIZEN CONSULS: The report which I had the honor to make to you about two years ago on the Department of Coinage, which afterward was remanded to the Council of State, has raised various questions which merit a serious examination.

It has been asked—

1st. Are Gold Coins needed in the circulation?

2d. Supposing that they are useful and necessary, ought they to receive from the law a fixed value, or is it better to let them seek their value in trade?

3d. In case the value of Gold Coins should be fixed by law, what ought to be the proportion between the value of Gold and that of Silver?

I have always thought that the proper course was to seek the solution of these questions chiefly in the results of experience, which rarely deceives, and not exclusively in books, the learning of which, however sound it may be, is subject to vices of interpretation or of application which may bring serious errors in their train.

Thus, if I may make use of an illustration entirely trivial, it has often been repeated, with good foundation, that in matters of finance two and two do not always make four, although in rigorous principle nothing can be more certain than this calculation.

I pass to the examination of the questions proposed.

FIRST QUESTION.

Are Gold Coins needed in the circulation?

Gold Coins compose about a third of our specie. They are the principal instrument of our interior commerce. It is admitted that breadstuffs, cattle, and almost all the bulky objects of consumption, dissem-

* Martin Michel Charles Gaudin, 1756–1841, created by Napoleon Duke of Gaeta in 1809, entered the public service in 1783, was commissioner of finance from 1791 to 1794, minister of finance after 18 Brumaire, 1799, also during the 100 days, and governor of Bank of France, 1820–1834.—H.

inated throughout all parts of the republic, and which are gathered together for the provisioning of our cities, of the army, and of the sea-ports, are in the first instance purchased with Gold, because it would be impossible to transport in the market a sum in Silver specie sufficient to purchase 500 setiers of wheat, a hundred head of cattle, a thousand sheep, for the purchase of which it would be necessary to address oneself to six hundred different proprietors. It does not appear, therefore, that there can be any doubt that Gold is indispensable in France for transactions which interest society in general, and a theory cannot be admitted the application of which with one blow would deprive that department of trade which has for its object articles of prime necessity of the only means it possesses of supplying its first want. The question might also be asked, whether prudence would counsel the reduction in a moment of about a third of the mass of money at present in circulation? But, apart from these considerations, it appears that our views upon this subject are already settled.

SECOND QUESTION.

Should the Gold Coins receive from the law a fixed value, or should they be left to the movements of commerce?

The same considerations which do not appear to permit the banishment of Gold from the circulation seem to demand that the Coins which are to circulate should receive a fixed and determinate value from the law; otherwise, and if this value *of account* must continually depend upon the instability of the market rate of Gold bullion in trade, what could be the basis of the various transactions of which I have just spoken? How can the countryman who drives his cattle to the market know whether he is really receiving the price which he had intended to put upon them? With what facility could he not be cheated at every turn! In fine, if it be true that money is really *only a measure*, how conceive of one the length of which can vary from day to day? Would a material have been chosen of which to make the meter, for example, upon which the conditions of the atmosphere could exert such an influence that the meter would one day be several lines longer or shorter than the day before? It seems to me that the variations in the value *of account* of these Gold Coins would produce absolutely the same effect. But it is said this effect exists in spite of you, in spite of the fixity of the value *of account;* for the foreigner takes your Coin only at its real value, and this value is relative to the rating of Gold bullion in trade.

It seems to me that this objection is not powerful enough to establish an opinion contrary to that which I enounce, for Money is made for interior circulation, it is no longer as *Money*, it is exclusively as *merchandise*, that it goes abroad. But a comparison cannot be established between the mass of our transactions with foreigners and that of the operations which are daily consummated in the interior of the republic; it would, therefore, appear unreasonable to expose the latter to be continually dis-

turbed by a system which would derange all their combinations under the pretext that the value of account of our Money cannot be taken into consideration in our relations with the trade of other States. Now, the proof that the partisans of this system themselves dread its effects, if it were to be adopted in its full extent, is that they indicate two means of remedying them.

The first, to fix the value of Gold Coin for *payments to be made at public offices.*

The second, to oblige postmasters to receive Gold Coins at the rate fixed by the Government for their admission in the National Treasury.

* * * * * * * *

[The Reporter here enters upon a detailed argument of these propositions which had been set forth in the second report of Berenger (see page 724), and concludes in favor of Coins which should be Money as pieces of 20 and 40 francs.]

THIRD QUESTION.

In case the value of the Gold Coins were to be fixed by law, what ought to be the proportion between the value of Gold and that of Silver?

The general utility of Money has caused it to be placed among all nations in the rank of a part of the public expenditure. The preservation of the precious metals which compose it has necessarily, in consequence, called the attention of Governments to the means of escaping, or as far as possible reducing, the sacrifices which must be made in order to replace that portion of which the mass required for business should find itself deprived. The prosperity of agriculture, of manufactures, and of the arts is, without doubt, the most powerful means of retaining Coin in a country, but the relation to be established between the value of Gold and that of Silver has always been considered as an accessory object of care which must not be neglected. It has always been thought that the respective value of these two metals ought to be regulated in a ratio so chosen with reference to the ratios established in neighboring countries that the extraction of one or the other could offer no attraction to the cupidity of speculators. This observation was not forgotten at the time when the coinage of *louis* of Gold and of Silver was established under the reign of Louis XIII. A law of March 31, 1640, had valued the marc of fine Gold at 384 *livres*, a coinage of *louis* of Silver having been ordered in September, 1641. Fine Silver was valued at 27 *livres* 13 sous. According to these valuations 13 marcs 6 ounces of fine Silver were then needed to pay for one ounce of fine Gold. This proportion was based upon that which had been known to exist in neighboring States, according to the ordinances of their respective princes. Germany and Milan maintained the ratio of 12; Flanders and the Netherlands, 12½; England, 13$\frac{1}{5}$; and Spain, 13$\frac{1}{8}$.

France being in the midst of all these States who drew from her a

considerable part of the articles necessary to the support of life, the proportion here was established at 13¾, in order to attract foreign specie, which had been decried, and to prevent the exportation of Gold from France to the neighboring States.

One sees that the principle of the Government, at that remote day, was to cherish more particularly the preservation of Gold as being the more precious of the two metals employed as Money.

It appears that the principle had changed at the commencement of the reign before the last, for from 1726 down to October 30, 1785, the proportion had been fixed at about 14½; it was lower than that then fixed among the greater part of the preponderant nations in Europe, and during this long space of time no one noticed that any inconvenience resulted from this difference.

In 1785 a voice is raised saying that our Gold is being taken away by foreigners; haste is made to recoin at once, and we are made to pass directly from the lowest to the highest ratio. It was a return to the old principle, the abandonment of which had in a series of sixty years occasioned no appreciable effect.

What ought we to do to-day? It seems to me that we ought to seek to render the proportion between Gold and Silver more stable, both at home and in other nations, by the valuation which we shall adopt for ourselves. See in this connection what I have gathered in the observations of a man thoroughly versed in this matter.

"France and England are the only nations which we can to-day recognize as nations of preponderating importance; other States of Europe follow more or less the impulse given by these great powers. The proportion in England is about [*sic*] 1 to 15,* and already our commerce has of its own motion held below this proportion, since for a long period the rate of the kilogramme of Silver has been quoted at 224 francs, and the kilogramme of Gold at 3,356 instead of 3,360, at which it ought to be fixed if the proportion was exactly 1 to 15.†

It is then probable that in adopting that proportion we shall have no inconveniences to fear, and then all will proceed in conformity to our system of weights, and counting can be made by decimals. Our pieces of Gold of the weight of 10 grammes, at nine-tenths fine, will be 30 francs; coins might be struck of 5 grammes which would be worth 15 francs and could be called *Gold Francs*. The Gold Franc and the Silver Franc would then have precisely the same weight and would represent a round number of 5-franc pieces. It is true that one could not pay 100 francs in Gold pieces, but they could be paid with 5-franc pieces without change."

* According to the Directors of the Mint this proportion should be 1 to 15½ [*sic*].

† I observe that it may not be proper to decide in view of these ratios, if it be considered that now for some time many of the *louis* are altered by clippers, that they only figure in the market as ingots, and that they produce an overstocking of the market, injurious to the price of Gold. This inconvenience will cease when the coinage of Gold shall be resumed and there shall be a fixed price at the mint.

This system appeared seductive to me, from various points of view; but without intending to decide opinion upon a point which has been the subject of so many controversies, I will observe that since 1785 there has been no occasion to remark that the proportion of 15½ has brought about speculations to carry Gold to us and take away our dollars; and that the price of Gold in commerce has always been relative to the price of Gold at the mints; but it appeared to me that it might be useful to consider this same question from a point of view specially relative to the circumstances in which we find ourselves placed.

It may be that the proportion of one-fifteenth is that which would adapt itself with a more rigorous exactness both to the ratio which is observed in that one of the neighboring States to which we have the greatest interest in adapting ourselves, and to our new system of weights and measures; but it is not demonstrated to me, as I have already observed, that in maintaining our present proportion, that of 15½, we should be exposed to sensible inconvenience; while according to the calculations of the Directory of the Mint the adoption of the proportion of one-fifteenth would occasion an enormous difference in the position of the owners of the Gold which is to-day to be recoined. In fact, this difference would be from 1,800,000 francs to more than 24,000,000 [*sic*]; now such a difference would appear to demand that the inconvenience to arise from not changing our present proportion should be demonstrated by evidence which can leave no doubt before the determination be made to relieve it by so great a sacrifice.* A profound discussion can alone conduct to the solution of a question of such high importance.

Provisionally, I feel that I must persist in the propositions which I made in my first report, both for the proportion of 15½ and for the coinage of 20 and 40 franc pieces, which I regard as very conducive to ease in keeping accounts, and which stand outside of the decimal system only as regards weight; that is to say, that the value of the Gold pieces which are to be coined should determine their weight, while in the opposing system it would be the weight which would control their denomination. For the rest, in either system the monetary unit would be represented by a determinate quantity of Silver, this material being preferable for the reason that it constitutes the greater part of the Coin of the Republic.

* In a note to "Observations on the Second Report of the Committee on Coinage," by Mirabeau the elder (*Tonneau*, the barrel, brother of the great Mirabeau), the author says: "As I am the only one who of late has written on the operation of the recoinage of 1785, it is no doubt I whom the committee mean to point out as the *partisan of this operation and its author.* Now, it is well known that I am neither friend nor *partisan of Mr. Calonne*, and as for this measure itself, I know better than those do who attack it, I know, I say, theoretically and anecdotically, how and to what extent the ratio was too high; but, I repeat, there is an aimless mischievousness in undertaking the criticism of it in the National Assembly, inasmuch as, even supposing this measure to have been a hundred times worse than it was, it is impossible to do away with the fact that it has been actually accomplished."—H.

Another question has been agitated, that of deciding whether the cost of coinage shall in future be put upon the expenses of the Government. I had proposed the negative of this by my first report. I can only persist in this opinion, which the reporter of the Council of State appears to have shared.

* * * * * * *

Paris, 26 Brumaire, An XI.

The Minister of Finances,
GAUDIN.

VI.

CONCLUSIONS.

I present these extracts without comment other than a brief summing up of their bearing upon the question of market prices and legal ratios mentioned in the Introduction. There is no evidence in them that 15½ was the market price in 1785. Nor, indeed, does it appear that either in the years directly following 1785, when the Coinage remained under Seigniorial Restrictions, or, later, when Free and Gratuitous Coinage were grasped at as means of attracting metal to the Mint, or, later still, when issue after issue of Paper Money swept metal from the field, did the condition of France make possible a coinage of Gold at the new ratio extensive enough to marshal any controlling force to raise the rating of Gold in commerce up to the legal rating of the new *louis;* while the admissions of the Financé Ministers under Louis XVI and under Napoleon, who respectively presided over the Recoinage of 1785 and over the adoption of the Law of 1803, as well as the selection by the Commission of 1790 of 14$\frac{7}{9}$ as a substitute for the ratio of 15½, which they anathematized, appear not only to complete the justification of Hamilton's adoption of 15 in 1791, but strongly to indicate that in 1803 the American ratio was entitled, on economic grounds, to serve as a model for the monetary legislators of France. The point of monetary doctrine alluded to on pages 250 and 251 is discussed hereafter in a paper on the "Rise of Gold between 1770 and 1830."

ENGLAND.

STATUTES ESTABLISHING FREE AND GRATUITOUS COINAGE OF SILVER AND GOLD IN ENGLAND.

Anno decimo octavo Caroli II. C. 5, [1666.]

CAP. V.

AN ACT for encouraging of coinage.

Whereas it is obvious, that the plenty of current coins of gold and silver of this kingdom is of great advantage to trade and commerce; for the increase whereof, your Majesty in your princely wisdom and care hath been graciously pleased to bear out of your revenue half the charge of the coinage of silver money; (2) for the preventing of which charge to your Majesty, and the encouragement of the bringing gold and silver into the realm, to be converted into the current money of this your Majesty's kingdom, we your Majesty's dutiful and loyal subjects do give and grant unto your Majesty the rates, duties or impositions following, and do beseech your Majesty that it may be enacted; (3) and be it enacted by the King's most excellent majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present Parliament assembled, and by the authority of the same, that whatsoever person or persons, native or foreigner, alien or stranger, shall from and after the twentieth day of December one thousand six hundred and sixty and six, bring any foreign coin, plate or bullion of gold or silver, in mass, molten or allayed, or any sort of manufacture of gold or silver, into his Majesty's mint or mints within the kingdom of England, to be there melted down and coined into the current coins of this kingdom, shall have the same there assayed, melted down and coined with all convenient speed, without any defalcation, diminution or charge for the assaying, coinage, or waste in coinage; (4) so as that for every pound troy of crown or standard gold that shall be brought in and delivered by him or them to be assayed, melted down and coined, as aforesaid, there shall be delivered out to him or them respectively a pound troy of the current coins of this kingdom, of crown or standard gold; (5) and for every pound troy of sterling or standard silver that shall be brought in and delivered by him or them to be assayed, melted down and coined, as aforesaid, there shall be delivered out to him or them respectively, a pound troy of the current coins of this kingdom, of sterling or standard silver, and so proportionably for a greater or lesser weight; (6) and for every pound troy of gold or silver that shall be brought in and delivered to be assayed, melted down and coined, as aforesaid, that shall be finer upon assay than crown gold or standard silver, there shall be delivered for the same so much more than a pound troy as the same doth in proportion amount unto in fineness and

value; (7) and for every pound troy of gold or silver that shall be brought in and delivered to be assayed, melted down and coined, as aforesaid, that shall be coarser or baser upon assay, or worse in value than crown gold or standard silver, there shall be delivered for the same so much less than a pound troy as the same doth fall short in fineness or value; and so for a greater or lesser quantity.

II. And it is hereby further enacted by the authority aforesaid, That there shall be no preference in point of assaying or coinage; but that all gold and silver brought in and delivered into the mint, to be assayed and coined, shall be assayed, coined and delivered out to the respective importers, according to the order and times of bringing in and delivering the same into the mint or mints, and not otherwise; so as he that shall first bring in and deliver any gold or silver to be coined, shall be taken and accounted the first person to have the same assayed, coined and delivered; and he or they that shall bring in and deliver any gold or silver next, to be accounted the second to have the same assayed, coined and delivered, and so successively in course: (2) and that the gold and silver brought in and coined, as aforesaid, shall be in the same order delivered to the respective bringers in thereof, their executors, administrators or assigns successively, without preference of one before the other, and not otherwise: (3) and if any undue preference be made in entering of any gold or silver, or delivering out of any money coined, contrary to the true intent and meaning of this act, by any officer or officers of the mint or mints; then the party or parties offending shall be liable by action of debt, or on the case, to pay the value of the gold or silver brought in, and not entered and delivered according to the true intent, meaning and direction of this act, as aforesaid, with damages and costs to the party or parties grieved, and shall be fore-judged from his or their place or office: (4) and if such preference be unduly made by any his or their deputy or deputies, clerk or clerks, without direction or privity of his or their master or masters, then such deputy or deputies, clerk or clerks only shall be liable to such action, damage and costs, as aforesaid, and be forever after incapable of serving or bearing office in any mint in the Kingdom of England.

III. Provided always, That it shall not be interpreted any undue preference, to incur any penalty, in point of delivery of monies coined, if the officer or officers, or their deputies or clerks, shall deliver out or pay any monies coined to any person or persons that do come and demand the same upon subsequent entries, before others that did not come to demand their monies in their order and course, so as there be so much money reserved as will satisfy them, which shall not be otherwise disposed of, but kept for them.

IV. And for the more orderly and clear performance thereof, be it enacted, and it is hereby enacted by the authority aforesaid, That the master-worker of his Majesty's mint or mints for the time being, shall at the time of the delivery and entry of any gold or silver in the said mint or mints, give unto the bringer or bringers in thereof to be coined, a bill under his hand denoting the weight, fineness and value thereof, together with the day and order of its delivery into the said mint or mints.

V. And for the further encouragement and assurance of such as shall bring any gold or silver into his Majesty's said mint or mints to be coined; (2) be it enacted, and it is hereby enacted by the authority aforesaid, That no confiscation, forfeiture, seizure, attachment, stop or restraint whatsoever shall be made in the said mint or mints, of any gold or silver brought in to be coined, for or by reason of any imbargo, breach of the peace, letters of mart or reprisal, or war within any foreign nation, or upon any other account or pretence whatsoever; (3) but that any gold and silver brought into any of his Majesty's mint or mints within the Kingdom of England to be coined, shall truly and with all convenient speed be coined and delivered out to the respective bringer or bringers in thereof, their respective executors, administrators or assigns, according to the rules and directions of this act.

VI. And whereas it cannot be reasonably expected, that the expence, waste, and charge in assaying, melting-down and coinage be borne by your Majesty, and for the

further encouragement of coinage; (2) be it enacted, and it is hereby enacted by the authority aforesaid, That for every tun of wines, vinegar, cider, or beer that shall be imported or brought into the port of London, or into any other port creek, or place within the Kingdom of England, dominion of Wales, or town of Berwick upon Tweed, from any parts beyond the seas, or Scotland, from and after the twentieth day of December in the year of our Lord one thousand six hundred sixty and six, there shall be levied, collected and paid the sum of ten shillings: (3) and for every ton of brandy-wines or strong-waters that shall be imported as aforesaid, the sum of twenty shillings; (4) and so proportionably for a greater or lesser quantity, to be levied, collected and paid at the respective custom-houses to the collectors and other officers of the customs for the time being at the importation of the said commodities, over and above all other duties charged, leviable and payable upon the said commodities, and to be by them distinguished and kept apart from all other monies by them collected and levied upon the same commodities, or upon any other commodities or merchandizes whatsoever; (5) and to be by the said collector or collectors respectively so answered and paid quarterly into the receipt of the exchequer of your Majesty, your heirs and successors, there also to be kept distinct and apart from all other monies arising by the customs, or by any other way or revenue whatsoever; which said duty they are hereby enjoined to receive and pay according to the several directions of this act, without any salary or fee.

VII. And be it further enacted and declared by the authority aforesaid, That all manner of wines, vinegar, cyder, beer, brandy-wines and strong-waters imported as aforesaid, shall pay their several and respective duties imposed by this act; and upon non-payment thereof shall be liable to such and the same pains, penalties and forfeitures, as in and by the late acts for tonnage and poundage, and for frauds, are enacted and appointed, upon non-payment of the duties by the said acts imposed upon goods and merchandizes of the same nature with those mentioned in this act.

VIII. Provided always, and it is hereby enacted, That for what of the aforesaid commodities shall be transported into any parts beyond the seas, within the term and space of one year after the importation thereof, that the duty paid by this act for the same shall be repaid by the respective collectors of the customs for the time being.

IX. And it is hereby further enacted, That no monies leviable and payable by this act shall be applied or converted to any use or uses whatsoever, other than to the defraying the charge and expence of the mint or mints, and of the assaying melted down, waste and coinage of gold and silver, and the encouragement of the bringing in of gold and silver into the said mint or mints, there to be coined into the current coins of this kingdom; (2) nor shall any of the said monies be issued out of the exchequer, but by order or warrant of the lord treasurer and under-treasurer, or commissioners of the treasury for the time being, to the master and worker, or masters and workers of your Majesty's mint or mints for the time being, and mentioning, that they are for the use and service aforesaid, to be kept in his Majesty's office of receipt in the said mint or mints under the usual keys of the warden, master and worker, and comptroller for the time being, and issued out thence from time to time, according to the manner and course of the said mint or mints respectively.

X. And it is hereby further enacted, That there shall not be issued out of the exchequer of the said monies in any one year, for the fees and salaries of the officers of the mint or mints, and towards the providing, maintaining and repairing of the houses, offices, and buildings and other necessaries for assaying, melting down and coining above the sum of three thousand pounds sterling money, and the overplus of the said monies so kept or to be kept as aforesaid, shall be employed for and towards the expence, waste and charge of alloying, melting down and coinage, and buying in of gold and silver to coin, and not otherwise.

XI. And lastly, be it enacted, and it hereby enacted by the authority aforesaid, That this act shall continue and be in force until the twentieth day of December which shall, in the year of our lord one thousand six hundred seventy-one, and until the end of the first session of parliament then next following and no longer.

XII. Provided always, and be it further enacted, That whereas his Majesty in and by his letters patents under his great seal, dated at Westminster the twentieth day of August in the twelfth year of his reign, did for divers good causes and considerations him moving, give and grant to dame Barbara Villiers widow, the sum of two pence, by tale out of every pound weight troy of silver monies, which from thenceforth should be coined by virtue of any warrant or indenture made and to be made by his Majesty, his heirs and successors, to have, hold, receive, perceive, and take the same unto the said dame, Barbara Villiers, her executors, administrators and assigns, from the ninth day of the then instant August weekly, as the said monies should be coined, for and during the term of one and twenty years, as by the same doth appear; that his Majesty may, out of the monies leviable by this act appoint and cause reasonable satisfaction to be made yearly to the said dame Barbara Villiers, her executors and administrators, for her interest in the premises, not exceeding the sum of six hundred pounds in any one year.

[This statute was kept permanently in force by 25 Car. 2, c. 8; 1 Jac. 2, c. 7; 4 and 5 W. and M., c. 24; 12 and 13 W. 3, c. 41; 7 Annae., c. 24; 1 Geo. I, c. 18; 9 Geo. I, c. 19; 4 Geo. 2, c. 12; 12 Geo. 2, c. 5; 19 Geo. 2, c. 14; 27 Geo. 2, c. 11, and by the following:]

(Anno primo Geo. III, cap. XVI.)

AN ACT to continue the duties for encouragement of the coinage of money.

May it please your most excellent Majesty;

Whereas by an act made in the eighteenth year of the reign of King Charles the Second, and continued, with some additions, by an act made in the twenty-fifth year of his reign, both which acts were revived, and further continued, by an act made in the first year of the reign of King James the Second, and further continued by several subsequent acts made in the fourth year of the reign of King William and Queen Mary, and in the twelfth and thirteenth year of the reign of King William the Third, certain rates and duties were imposed on all wines, vinegar, cyder, and beer, and also on all brandy wines and strong waters, imported or brought into the port of London, or into any other ports, creeks, or places, within the Kingdom of England, dominion of Wales, or town of Berwick upon Tweed, the said several rates and duties to be applied towards defraying the charge of the coinage of gold and silver monies in the mints of England:

And whereas after the union of the two Kingdoms of England and Scotland, an act was made in the seventh year of the reign of Queen Anne, whereby the like rates and duties were granted and made payable for the like purposes, and for the term therein mentioned, on all wines, vinegar, cyder, beer, brandy wines and strong waters, imported into Great Britain; and the said acts made in the eighteenth and twenty-fifth years of the reign of King Charles the Second, and also an act made in the fourth year of the reign of Queen Anne, and every clause, article, and sentence in the said acts, or any of them, contained, were revived, and further continued, with some additional provisions, for the service of the mints in England and Scotland respectively: and whereas by an act made in the first year of the reign of King George the First, the said several rates and duties, and all the said former acts, and all other acts of parliament concerning coinage then being in force, were revived and continued for the further term therein mentioned; and a provision was thereby made for supplying any deficiency of the revenue settled for the encouragement of the coinage:

And whereas the said several rates and duties, and all the said acts concerning coinage, were, with a like provision for supplying any deficiency of the said revenue, further continued by several subsequent acts made in the ninth year of the reign of King George the First, and in the fourth year of the reign of his late majesty King George the Second:

And whereas by an act made in the ninth year of the reign of his said late majesty King George the Second, the said duties on brandy wines and strong waters, were united to the aggregate fund, and still continue part thereof:

And whereas by an act made in the twelfth year of the reign of his said late majesty King George the Second, and also by one other act made in the nineteenth year of the reign of his said late Majesty, such only of the said rates and duties so granted by the said act made in the eighteenth year of the reign of King Charles the Second, as were thereby charged on the importation of wines, vinegar, cyder, and beer, and all the said former acts, and all other acts of parliament concerning coinage, then being in force, and the same provision for supplying any deficiency of the said revenue, were further continued, and, by an act made in the twenty-seventh year of the reign of his said late majesty King George the Second, have continuance for the space of seven years from the first day of March, one thousand seven hundred and fifty four, and until the end of the first session of parliament then next following, and no longer:

And whereas great benefit hath arisen from the encouragement of coinage given by the said acts, and it is, therefore, expedient that an adequate revenue be settled and continued for the like purposes: we, your Majesty's most dutiful and loyal subjects, the commons of Great Britain in parliament assembled, do give and grant unto your Majesty the rates, duties, and impositions, hereinafter-mentioned, for and during the term hereinafter-expressed; and do humbly pray that it may be enacted; and be it enacted by the King's most excellent Majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same,

That such and the like rates, duties, and impositions, as by the said act of the eighteenth year of the reign of King Charles the Second were granted, and, by the said subsequent acts, were continued, for and upon the importation of wines, vinegar, cyder, and beer, during the respective terms therein mentioned, shall be further continued, and be paid and payable to his Majesty, his heirs, and successors, for and upon all wines, vinegar, cyder, and beer, which shall be imported or brought into Great Britain, within or during the space of seven years, to commence from the first day of March, one thousand seven hundred and sixty-one, and until the end of the first session of parliament then next following, and no longer; and that all the said former acts, and all other acts of parliament concerning coinage, and every of them, and every clause, article, and sentence in them, or any of them contained, now being in force, shall be, and are, by virtue of this act, continued, and shall be in force, and be duly put in execution, for and during all such time and term as are before-mentioned, as fully and effectually as if the same were particularly repeated and re-enacted in the body of this present act.

II. And, to the end the importers of gold and silver into the mints of England and Scotland respectively, may not be discouraged by any deficiency of the revenue by this act settled for defraying the coinage thereof, be it further enacted by the authority aforesaid, That it shall and may be lawful to and for the commissioners of the treasury, or any three or more of them now being, or the high treasurer, or any three or more of the commissioners of the treasury for the time being, and he or they is or are hereby empowered and directed, out of the Monies arising by this act, or out of any other publick supplies granted, or to be granted, by parliament, to cause so much Money to be applied as shall be necessary for defraying the expenses of the said mints of England and Scotland respectively, by way of imprest and upon account for that service, so as the same, together with the Coinage duties arising by this act, do not exceed, in any one year, the sum of fifteen thousand pounds, and so as the said Monies be issued out of the exchequer of Great Britain to the master of the mint in England, and to the master of the mint in Scotland respectively, for the said purposes.

[The next re-enactment is that of 8 Geo. III, c. 1, which continues the act until the statute here reprinted of 9 Geo. III, chap. 2, re-enacts it in perpetuity.]

Anno nono George III, 1768.

CAP. XXV.

AN ACT for making perpetual an act made in the first year of the reign of his present Majesty, intituled, "An act to continue the duties for encouragement of the Coinage of Money."

May it please your most excellent Majesty;

Whereas an act was made in the first year of your Majesty's reign, intituled, An act to continue the duties for encouragement of the Coinage of Money, whereby the duties and laws therein mentioned or referred to were continued for the term of seven years, to commence from the first day of March, one thousand seven hundred and sixty-one, and until the end of the first session of parliament then next following: and whereas, by an act made in the last session of parliament intituled, An act for further continuing certain laws to prohibit for a limited time the exportation of corn, grain, meal, malt, flour, bread, biscuit, and starch; and also the extraction of low wines and spirits from wheat and wheat flour; for further allowing the importation of wheat and wheat flour, barley, barley-meal and pulse, free of duty, into this Kingdom from any part of Europe; and for allowing the importation of oats and oat-meal, rye and rye-meal, into this Kingdom, for a limited time, free of duty; and also for continuing such other laws as will expire before the beginning of the next session of parliament; the said act made in the first year of your Majesty's reign was continued until the end of this present session of parliament:

And whereas it is expedient that the said act made in the first year of your Majesty's reign should be made perpetual: We, your Majesty's most dutiful and loyal subjects, the commons of Great Britain in parliament assembled, do humbly pray your Majesty that it may be enacted; and be it enacted by the King's most excellent majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, That the said act made in the first year of his present Majesty's reign intituled "An act to continue the duties for encouragement of Coinage of Money," and all the clauses, powers, provisions, directions, rules, and articles therein contained, shall be and are hereby, made perpetual; and shall continue in force and be carried into execution, as fully and effectually as if the same were particularly repeated and re-enacted in the body of this present act, and as if there had not been any limitation of time whatsoever expressed in the said act for the determination thereof, or of any matter therein contained.

[Although practically abrogated, so far as Silver was concerned, by the clauses for prohibition of Silver Coinage in 38 Geo. III, c. 59, 1798 (see page 345), this statute remained in force till 1816; when, by 56 Geo. III, c. 68 (see page 373), so much of it as guaranteed gratuitous Coinage of Silver was repealed, and the coinage was ordained of Silver Coins which should contain about 6 per cent. less Silver than Coins under the former standard, while the mint price remained the same and payable in Silver; the Legal Tender of the Silver was reduced to 40 shillings.]

THE DEBATE AND LEGISLATION OF 1717, AND THE ADVICE OF NEWTON.

[From Cobbett's Parliamentary History of England, Vol. VII, pp. 523-534.]

DEBATE IN THE COMMONS ON THE SCARCITY OF THE SILVER, AND ON LOWERING THE VALUE OF THE GOLD COINS.

DEC. 29 [*sic*]. Mr. Aislabie took notice of the great scarcity of the Silver Species, which in all probability, was occasioned by the exportation of the same, and the importation of Gold; and proposed that a speedy remedy might be put to that growing evil, by lowering the value of the Gold Species. He was seconded by Mr. Caswall, member for Leominster, one of the Sword-Blade Company; but Mr. R. Walpole, who did not expect such a motion, said "This was a matter of so great importance, that it ought to be well weighed and maturely considered, before the House came to any Resolution thereupon." It was accordingly resolved,

1, "That this House will, to-morrow morning, resolve itself into a Committee of the whole House, to take into consideration the state of the nation in relation to the Gold and Silver Coins of this Kingdom;—2, That an humble address be presented to his Majesty, That he will be graciously pleased to give directions, that the Representations made by the officers of the Mint to the Lords Commissioners of the Treasury, in relation to the Gold and Silver Coins of this Kingdom, may be laid before this House."

Ordered, That the Officers of the Mint do attend this House to-morrow morning.

DEC. 21. Mr. Aislabie renewed the motion he made the day before, relating to the Coin, and was seconded by Mr. Caswall,* who made a speech on the various and respective values, which at different times, Gold and Silver Coins have born, with respect one to the other, according to the plenty or scarcity of either, and suggested, that the over-valuation of Gold in the current coins of Great Britain, had occasioned the exportation of great quantities of silver species; and to that purpose laid open

*Mr. Caswall was knighted during the Session.

a clandestine trade, which of late years had been carried on by the Dutch, Hamburghers, and other foreigners, in concert with the Jews and other traders here, which consisted in exporting Silver Coins, and importing Gold in lieu thereof, which being coined into guineas at the Tower, near 15 pence was got by every guinea, which amounted to about 5 per cent. and as these returns might be made five or six times in a year, considerable sums were got by it, to the prejudice of Great Britain, which thereby was drained of silver and over-stocked with gold: concluding, that in his opinion, the most effectual way to put a stop to this pernicious trade, was to lower the price of guineas, and all other gold species.

This speech was received with general applause, and it was resolved in the Grand Committee, and unanimously agreed to by the House, "That an Address be presented to his majesty, to issue his royal Proclamation, to forbid all persons to utter, or receive any of the pieces of Gold, called Guineas, at any greater or higher rate than one and twenty shillings for each Guinea, and so proportionably for any greater or lesser pieces of coined Gold." This Address being presented to his majesty, a Proclamation was issued accordingly.*

* The following is a copy of the said Proclamation:

"G. R. Whereas the value of the Gold, compared with the value of the Silver in the current coins of this realm, as paid and received, is greater in proportion than the value of gold is to the value of silver in neighbouring nations; and the overvaluation of Gold in the current coins of this realm, hath been a great cause of carrying out and lessening the species of the Silver coins thereof, which is highly prejudicial to the trade of this Kingdom: And whereas the Commons in parliament have, by their Address, humbly besought us, That we would be graciously pleased to issue our royal Proclamation, to forbid all persons to utter or receive any of the pieces of Gold, called Guineas, at any greater or higher rate than one and twenty shillings for each guinea, and so proportionably for any greater or lesser pieces of coined gold, which we have graciously condescended unto. Now, for, and toward remedying the said evil, we have thought fit, with the advice of our privy Council, to issue this our royal Proclamation, hereby strictly prohibiting all and every person and persons whatsoever, to utter or receive any of the pieces of Gold Coin of this kingdom, commonly called Guineas (Which in our mint were coined only at twenty shillings each, but have been by our subjects paid and received at the rate of one and twenty shillings and six pence each) at any greater or higher rate or value than one and twenty shilling for each guinea, and so proportionably for the pieces of Gold called half guineas, double-guineas, and five-pound pieces; and the other pieces of ancient Gold Coin of this kingdom, which by their wearing may be diminished in their weight, at any greater or higher rate or value than as followeth, That is to say, the piece of gold now received and paid for three and twenty shillings and six pence, to be hereafter received and paid for three and twenty shillings, and no more. The piece of gold now received and paid for five and twenty shillings and six pence, to be hereafter received and paid for five and twenty shillings, and no more; and so proportionably for smaller pieces of the like gold coin; At which Rates and Values we do hereby declare the said respective pieces of coined gold to be current. And we do hereby strictly charge and command all our loving subjects whatsoever, that they do not presume to receive or pay the gold coins of this realm, at any greater rates or value than the rates and values aforesaid, upon pain of our highest displeasure and upon pain of the greatest punishment that by law may be inflicted upon them for their default, negligence and contempt in this behalf.

Given at our Court at St. James's, the 22nd of December, 1717. In the 4th Year of our reign."

REPORTS MADE BY SIR ISAAC NEWTON, MASTER OF THE MINT, CONCERNING THE STATE OF THE GOLD AND SILVER COINS.

This day, Mr. Lowndes presented to the House the following reports, made by Sir Isaac Newton, Master of the Mint, concerning the Gold and Silver Coins:

"*To the right hon. The Lords Commissioners of His Majesty's Treasury.*

"May it please your lordships;

"In obedience to your lordships' order of reference, of August 12th, that I should lay before your lordships a State of the Gold and Silver Coins of this kingdom, in weight and fineness, and the value of Gold in proportion to silver, with my observations and opinions; and what method may be best for preventing the melting down of the Silver Coin; I humbly represent, that a pound weight troy of gold, 11 ounces fine, and one ounce allay, is cut into 44½ guineas: and a pound weight of silver, 11 ounces two pennyweight fine, and 18 pennyweight allay, is cut into 62 shillings; and, according to this rate, a pound weight of fine gold is worth 15 pounds weight six ounces 17 pennyweight and five grains of fine silver, reckoning a guinea at 1*l.* 1*s.* 6*d.* in Silver money; but silver in bullion, exportable, is usually worth 2*d.* or 3*d.* per ounce more than in coin; and if, at a medium, such bullion of Standard-allay, be valued at 5*s.* 4½*d.* per ounce, a pound weight of fine gold will be worth but 14 lb. wt. 11 oz. 12 dwt. 9 gr. of fine silver in bullion; and, at this rate, a guinea is worth, but so much silver as would make 20*s.* 8*d.* When ships are lading for the East-Indies, the demand of silver, for exportation, raises the price to 5*s.* 6*d.* or 5*s.* 8*d.* per ounce, or above; but I consider not those extraordinary cases.

"A Spanish pistole was coined for 32 rials, or four pieces of eight rials, usually called pieces of eight, and is of equal allay, and the sixteenth part of the weight thereof; and a Doppio Moeda of Portugal was coined for ten crusados of silver, and is of equal allay, and the sixteenth-part of the weight thereof: Gold is, therefore, in Spain and Portugal of sixteen times more Value than Silver of equal weight and allay, according to the standard of those Kingdoms; at which rate a guinea is worth 22*s.* 1*d.*; but this high price keeps their Gold at home in good plenty and carry away the Spanish Silver into all Europe, so that at home they make their payments in Gold, and will not pay in Silver without a premium; upon the coming in of a Plate fleet the premium ceases, or is but small; but as their Silver goes away, and becomes scarce, the premium increases, and is most commonly about six per cent., which being abated, a guinea becomes worth about 20*s.* 9*d.* in Spain and Portugal.

"In France a pound weight of fine Gold is reckoned worth 15 pounds weight of fine Silver; in raising or falling their money their Kings' edicts have sometimes varied a little from this proportion in excess or defect, but the variations have been so little that I do not here consider them: By the edict of May, 1709, a new pistole was coined for

four new lewisses, and is of equal allay, and the fifteenth-part of the weight thereof, except the errors of their mints; and by the same edict fine Gold is valued at 15 times its weight of fine Silver; and, at this rate, a guinea is worth 20*s.* 8½*d.* I consider not here the confusion made in the monies in France by frequent edicts to send them to the Mint and give the King a tax out of them: I consider only the value of Gold and Silver in proportion to one another.

"The ducats of Holland, and Hungary, and the empire, were lately current in Holland, among the common people, in their markets, and ordinary affairs, at five guilders in specie, and five stivers; and commonly changed for so much Silver-monies in three-guilder pieces and guilder-pieces, as guineas are with us for 21*s.* 6*d.* sterling; at which rate, a guinea is worth 20*s.* 7½*d.*

"According to the rate of Gold to Silver in Italy, Germany, Poland, Denmark, and Sweden, a guinea is worth about 20*s.* and 7*d.* 6*d.* 5*d.* or 4*d.* for the proportion varies a little within the several governments in those countries. In Sweden, Gold is lowest in proportion to silver, and this hath made that Kingdom, which formerly was content with copper money, abound of late with silver, sent thither (I suspect) for naval stores.

"In the end of King William's reign, and the first year of the late queen, when foreign coins abounded in England, I caused a great many of them to be assayed in the mint and found by the assays that fine gold was to fine silver in Spain, Portugal, France, Holland, Italy, Germany, and the northern Kingdoms, in the proportions above-mentioned, errors of the mint excepted.

"In China and Japan, one pound weight of fine gold is worth but nine or ten pounds weight of fine silver; and in East-India it may be worth twelve: and the low price of gold in proportion to silver carries away the silver from all Europe.

"So then, by the course of trade and exchange between nation and nation in all Europe, fine gold is to fine silver as $14\frac{4}{5}$ or 15 to one; and a guinea, at the same rate, is worth between 20*s.* 5*d.* and 20*s.* 8½*d.*, except in extraordinary cases, as when a Plate fleet is just arrived in Spain, or ships are lading here for the East Indies, which cases I do not here consider: And it appears by experience, as well as by reason, that silver flows from those places, where its value is lowest in proportion to gold, as from Spain to all Europe, and from all Europe to the East-Indies, China, and Japan; and that gold is most plentiful in those places, in which its value is highest in proportion to silver, as in Spain and England.

"It is the demand for exportation which hath raised the price of exportable silver about 2*d.* or 3*d.* in the ounce above that of silver in coin, and hath thereby created a temptation to export, or melt down, the silver coin, rather than give 2*d.* or 3*d.* more for foreign silver; and the demand for exportation arises from the higher price of silver in other places than in England in proportion to gold; that is, from the higher

price of gold in England than in the other places in proportion to silver; and therefore may be diminished, by lowering the value of gold in proportion to silver: If gold in England, or silver in East-India, could be brought down so low as to bear the same proportion to one another in both places, there would be here no greater demand for silver, than for gold to be exported to India;* and if gold were lowered only so as to have the same proportion to the silver money in England which it hath to silver in the rest of Europe, there would be no temptation to export silver rather than gold to any other part of Europe: And to compass this last, there seems nothing more requisite than to take off about 10*d.* or 12*d.* from the guinea; so that gold may bear the same proportion to the silver money in England, which it ought to do by the course of trade and exchange in Europe; but if only 6*d.* were taken off at present, it would diminish the temptation to export, or melt down, the silver coin; and, by the effects, would shew hereafter, better than can appear at present, what further reduction would be most convenient for the public.

"In the last year of King William, the dollars of Scotland, worth about 4*s.* 6½*d.* were put away in the north of England for 5*s.* and at this price began to flow in upon us: I gave notice thereof to the lords commissioners of the treasury; and they ordered the collectors of taxes to forbear taking them; and thereby put a stop to the mischief.

"At the same time, the lewidors of France, which were worth but seventeen shillings and three farthings apiece, passed in England at 17*s.* 6*d.*: I gave notice thereof to the lords commissioners of the treasury; and his late majesty put out a proclamation, That they should go but at 17*s.*; and thereupon they came to the mint; and 1,400,000*l.* were coined out of them; and if the advantage of 5½*d.* in a lewidor, sufficed at that time to bring into England so great a quantity of French money, and the advantage of three farthings in a lewidor to bring it to the mint, the advantage of 9*d.* half-penny in a guinea, or above, may have been sufficient to bring the great quantity of gold, which has been coined in these last fifteen years, without any foreign silver.

"Some years ago, the Portugal moedors were received in the west of England at 28*s.* a-piece; upon notice from the mint that they were worth only about 27*s.* 7*d.*, the Lords Commissioners of the Treasury, ordered their receivers of taxes to take them at no more than 27*s.* 6*d.* Afterwards many gentlemen in the west sent up to the treasury a petition, that the receivers might take them again at 28*s.* and promised to get returns for this money at that rate; alledging, that when they went at 28*s.* their country was full of gold, which they wanted very much: But the commissioners of the treasury, considering, that at 28*s.* the nation would lose 5*d.* apiece, rejected the petition: And if an advantage to the merchant of 5*d.* in 28*s.* did pour that money in upon us, much more hath an advantage to the merchant of 9½*d.* in a guinea, or above, been able to

*See pages 266 and 778.

bring into the Mint great quantities of gold, without any foreign silver; and may be able to do it still, till the cause be removed.

"If things be let alone till silver money be a little scarcer, the gold will fall of itself; for people are already backward to give silver for gold, and will, in a little time, refuse to make payments in silver without a premium, as they do in Spain; and this premium will be an abatement in the value of the gold; and so the question is, Whether gold shall be lowered by the government, or let alone till it falls of itself, by the want of silver money. It may be said, that there are great quantities of silver in plate; and if the plate were coined, there would be no want of silver money: But I reckon, that silver is safer from exportation in the form of plate than in the form of money, because of the greater value of the silver and fashion together; and therefore I am not for coining the plate, till the temptation to export the silver money, which is a profit of 2*d.* or 3*d.* an ounce, be diminished; for as often as men are necessitated to send away money for answering debts abroad, there will be a temptation to send away silver rather than gold, because of the profit, which is almost four per cent.; and, for the same reason, foreigners will choose to send hither their gold rather than their silver.

"All which is most humbly submitted to your lordships great wisdom.

"ISAAC NEWTON."

"MINT-OFFICE, 21*st September*, 1717.

"*To the Right Hon. the Lords Commissioners of His Majesty's Treasury.*

"May it please your Lordships;

"In obedience to your Lordships' order of reference of the 19th instant, That an account be laid before your Lordships of all the Gold and Silver, coined in the last 15 years; and how much thereof hath been coined out of plate upon public encouragements; and what copper money hath been newly coined; it is humbly represented, that since Christmas, 1701-2, to the 19th instant, there hath been coined in gold 7,127,835*l.*, in tale, reckoning 44½ guineas to a pound weight troy, and 21*s.* 6*d.* to a guinea; and in silver 223,380*l* sterling, reckoning 3*l.* 2*s.* to a pound weight Troy; and that part of this silver, amounting to 143,086*l.* sterling, was coined out of English plate, imported upon public encouragement, in the years 1709 and 1711; and another part, amounting to 13,342*l.*, was coined out of Vigo plate in the year 1703 and 1704; and another part, amounting to 45,732*l.* was coined from silver extracted from our own lead-ore; and the rest, amounting to 21,220*l.* was coined chiefly out of old plate melted down by goldsmiths; and some of it out of pieces of eight.

"The graver of the Mint has been hard at work, ever since the last session of parliament, in making the embossments and puncheons for the half-pence and farthings, and taking off a few dies from them: the making of an embossment, and a puncheon, for half-pence, takes up the time of about six weeks; and there have been two embossments, and two puncheons, made for the half pence, and one for the farthings; and now

these are finished, and some dies are made from the puncheons, it will take up a little time to examine the copper, and settle the best method of preparing, sizing, nealing, and cleaning it, and making it fit for the Mint; this being a manufacture different from that of coarse copper, and more difficult, and not yet practised in England; and as soon as this method is fixed, we shall begin to coin in quantity.

"All which is most humbly submitted to your lordships' great wisdom.

"Mint-Office Nov. 23, 1717.

"IS. NEWTON."

This day both Houses adjourned to the 13th of January.

JANUARY 13, 1718. The House of Commons met, and came to the following Resolutions:

1. "That this House will not alter the Standard of the Gold and Silver Coins of this Kingdom, in fineness, weight, or denomination. 2. Resolved, That this House will, upon Thursday sennight, resolve itself into a Committee of the whole House, to take into consideration the state of the nation, in relation of the Gold and Silver Coin of this Kingdom."*

DEBATE IN THE LORDS ON THE STATE OF THE COIN.

JANUARY 16. The Lords met this day, pursuant to adjournment. The Prince of Wales went to the House of Peers, which being very full, my Lord North and Gray stood up, and "took notice of the great ferment that was in the nation."—As his lordship made here a small pause, the Lords began to be very attentive, and some in pain, fearing his Lordship would touch upon matters of a high and nice nature: but his Lordship soon eased them, by mentioning only the great Scarcity of Silver, which occasioned a general stop of trade, and very much distressed the poor. Upon which, the Lords resolved to take that matter into consideration on Thursday the 23rd.†

JANUARY 23. The Lords in a grand committee, took into consideration the state of the nation, in relation to the Gold and Silver coins. The Lord Bingley, having represented the great prejudice that trade

* The lowering the value of Gold, which was thought a proper expedient to procure a greater circulation of Silver species, had, during the recess, a contrary effect, either, as was supposed, through the covetousness of some monied men, who hoarded up Silver, in hopes that the same would be raised; or out of fear that Gold would still be lowered; or through the malice of the disaffected, who, by the same method, thought, if not to distress the government, at least to raise murmurings against it among the common people, upon account of the stop which was thereby put to petty trade. In order therefore to remedy this great evil, as soon as the Commons met, they came to a resolution, "That this House will not alter the standard of the Gold and Silver Coins of this kingdom in fineness, weight, and denomination. The Lords came also to the same resolution, and ordered a bill to be brought in to prevent the melting down of the Silver Coin."—TINDAL.

† About this time a design against the King's life was discovered, etc., etc.

received from the scarcity of Silver, said, among other things, it was a matter of wonder a remedy had not seasonably been applied to so great an evil, which had visibly been growing for so many months past. Lord Stanhope answered him, that the scarcity of Silver species was owing to several causes: 1st, The increasing luxury in relation to Silver Plate. 2ndly. To the vast exports of Bullion and other plate to the East Indies. And 3dly. To the clandestine trade that had lately been carried on, of exporting Silver and importing Gold to and from Holland, Germany, and other parts. To prove these particulars, his lordship produced several papers, and, among the rest a scheme drawn up by Henry Martin, esq., inspector-general of the exports and imports at the custom-house, whereby it appeared that in the year 1717, the East India Company had exported near three millions of ounces of Silver, which far exceeds the imports of Bullion in that year. It necessarily followed that vast quantities of Silver species must have been melted down, both to make up that export and to supply silver-smiths. His lordship added, that it was impossible for those in the administration to remedy this evil without the interposition of the Parliament; and as for the trade of exporting Silver and importing Gold in lieu of it, which increased the scarcity of the first, the most effectual method that could be thought of to prevent it had been already used, viz, the lowering the price of Gold, which would not have failed to have in great measure, produced the desired effect but for the covetousness of some or the malice of others, who, by hoarding up Silver, thought either to make considerable gains, or to distress the government; so that, upon the whole matter, no fault could be found upon this score with the managers of His Majesty's treasury; but that, on the contrary, it might to their praise be observed, that the public credit never ran so high in any other hands, since the government could now borrow great sums at 3½ per cent.

The Earl of Oxford answered the lord Stanhope, and made some reflections, which the other returned very smartly. Though the lord viscount Townsend, the lord Coningsby, and some other peers, spoke also on this occasion, yet their lordships came that day to no resolution; but the further consideration of that matter being put off till Saturday the 25th of January, it was on that day resolved, "That no alteration should be made in the standard of the Gold and Silver Coins of this kingdom, in fineness, weight, or denomination;" which resolution was, on the 27th, reported and agreed to by the House. The next day their lordships resumed the consideration of that affair; and after having examined the officers of the mint, and the master and wardens of the goldsmith's company, ordered a Bill to be brought in, "to prevent the melting down of the Coins of the Kingdom."

EXTRACT FROM THE WRITINGS OF SIR JAMES STEUART, ILLUSTRATING THE MONETARY SITUATION OF ENGLAND, 1759-1773.

AN INQUIRY INTO THE PRINCIPLES OF POLITICAL ECONOMY, BY SIR JAMES STEUART, OF COLTNESS, BART.

(Vol. 2, Chap. 7, page 313.)

OF THE DISORDER IN THE BRITISH COIN, SO FAR AS IT OCCASIONS THE MELTING DOWN OR THE EXPORTING OF THE SPECIE.

The defects in the British coin are these:

First. The proportion between the Gold and the Silver in it is found to be as 1 to 15 $\frac{2}{10}$, whereas the market price (1759) may be supposed to be nearly as 1 to 14$\frac{1}{2}$.

Secondly. Great part of the current money is worn and light.

Thirdly. From the second defect proceeds the third, to wit, that there are several currencies in circulation which pass for the same value without being of the same weight.

Fourthly. From all these defects results the last and greatest inconvenience, to wit, that some innovation must be made, in order to set matters on a right footing.

(Chap. 7, page 318, 319.—Note.)

I must also observe that the price of Standard Silver in the London market, in July, 1773, came to 5*s*. 2*d*. sterling per ounce, which is also the Mint price for Silver. This alteration in the price of Silver is not the consequence of the law; but has been effected by the operations of trade. Gold, ever since 1756, the beginning of the last war, has been rising in value all over Europe, with respect to Silver, and we now happily see the old proportion of the metals in British Coin (which is as 1 to 15.2) once more become the proportion in the London market.

Nothing so favorable, or less expected, could have happened for establishing a perfect regulation upon our coin. $\frac{22}{21}$ parts of one guinea, or 113 grains troy of fine Gold, or 1,718.7 ditto of fine Silver, are now become exact equivalents to each other, and both are the real and intrinsic value of one pound sterling. So the mean proportion of these quantities of the fine metals may be fixed to perpetuity, according to the rule laid down in the fourth chapter.

Another consequence of this lucky situation is, that there will be no more occasion for our old Silver Coin. Let it, therefore, be all cried down and sold for bullion, either at the Mint or market.

While the price of Silver continues at 5*s.* 2*d.* per ounce, Silver may be coined at the mint as well as Gold; and in a short time we may have as much of the one as of the other species; and were the proportion of the metals afterwards to vary from what it is at present (July, 1773), by the rule above laid down for changing the denomination of the Coin, no interruption would be given to the Mint, or any loss to those who incline to carry the metals to it to be coined.*

(Chapter 8, page 335.)

OF THE DISORDER OF THE BRITISH COIN, SO FAR AS IT AFFECTS THE VALUE OF THE POUND STERLING CURRENCY.

* * * * * * *

The price of bullion, therefore, when it is not influenced by extraordinary demand (such as for the payment of a balance of trade or for making an extraordinary provision of plate), but when it stands at what everybody knows to be meant by the common market price, is a very tolerable measure of the value of the *actual* money-standard in any country.

If it be therefore true that a pound sterling cannot purchase above 1,638 grains of fine Silver bullion, it will require not a little logic to prove that it is really, or has been for these many years, worth any more, notwithstanding the standard weight of it in England is regulated by the laws of the kingdom at 1,718.7 grains of fine Silver.

If to this valuation of the pound sterling drawn from the price of bullion we add the other drawn from the course of exchange, and if by this we find that when paper is found for paper upon the exchange of London a pound sterling cannot purchase above 1,638 grains of fine Silver in any country in Europe, upon these two authorities I think we may safely conclude (as to the matter of fact at least) that the pound sterling is not worth more, either in London or in any other trading city; and if this be the case, it is just worth 20 shillings of 65 to the pound troy.

If, therefore, the mint were to coin shillings at this rate, and pay for Silver bullion at the market price—that is, at the rate of 65 pence per ounce in those new-coined shillings—they would be in proportion to the Gold. Silver would be carried to the Mint equally with Gold, and would be as little subject to be exported or melted down.

(Chapter 8, page 337.)

It is absurd to say that the standard of Queen Elizabeth has not been debased by enacting that the English Unit shall be acquitted with 113 grains of fine Gold, as it would be to affirm that it would not be debased

*An examination of the tables of the ratio of Gold to Silver in Hamburg (page 708) and in London (page 647) will show that this anticipation was not realized, for the reason that Gold fell back to its former level.—H.

from what it is at present by enacting that a pound of butter should everywhere be received in payment for a pound sterling, although the pound sterling should continue to consist of 3 ounces, 17 pennyweights, and 10 grains of standard Silver, according to the statute of 43 Elizabeth. I believe in this case most debtors would pay in butter. * * *

(Chap. 8, pages 337–8.)

From what has been said, it is not at all surprising that the pound sterling should in fact be reduced nearly to the value of the Gold. Whether it ought to be kept at this value is another question, and shall be examined in its proper place. All that we here decide is, that the coining the pound troy into 65 shillings would restore the proportion of the metals, and render both species common in circulation.

(Chap. XI, pages 353–4.)

METHOD FOR RESTORING THE MONEY-UNIT TO THE STANDARD OF ELIZABETH, AND THE CONSEQUENCES OF THIS CHANGE.

I come now to the proposal of restoring the standard to that of the statute of Elizabeth, which is in other words the same with what has been proposed in bringing down the guineas to 20 shillings; except that it implies a new Coinage of all the Silver specie and of all the old Gold. Nothing is more easy than to execute this reformation.

1. The first step is to order all Coin, Gold and Silver, coined preceding a certain year, to pass by weight only.

2. To preserve the mint price of Silver as formerly, at 5*s*. 2*d*. the ounce, and to fix that of Gold at £3 14*s*. 2¼*d*.

3. To order the pound troy standard Silver to be coined as formerly, into 62 shillings, and the pound of Gold into 44½ guineas.

4. And last of all to order these guineas to pass for 20 shillings.

Thus the standard is restored to the value of the Silver by the statute of Elizabeth; the metals are put at within a mere trifle of the proportion of 1 to 14½; all the coin in the kingdom is brought to standard weight; no profit will be found in melting or exporting one species preferably to another; exchange will answer, when at par, to the real par (when rightly calculated), of either Silver or Gold, with nations, such as France, who observe the same proportions, and the pound sterling will remain attached to both the Gold and Silver as before.

B.—A DISSERTATION UPON THE DOCTRINE AND PRINCIPLES OF MONEY APPLIED TO THE GERMAN COIN. BY SIR JAMES STEUART, OF COLTNESS, BART.

(Composed at Tubingen in January, 1761; and translated into High Dutch in June, 1761.

(Vol. 5, pages 214, 215.)

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From the beginning of this century, Silver has been rising in its value, as a metal, in respect to Gold. From 1690 till 1717 it kept nearly the proportion of 1 to 15. The regulation of Leypzig in 1690, the Coinage in England in 1695, the Coinage in France in 1709, and the report of the celebrated Sir Isaac Newton to the Lords of the English Treasury, of the 21st September, 1717, are the authorities upon which this fact is established.

In 1726, the proportion was plainly changed, and the French nation, more intelligent in the doctrine of Coinage than any other in Europe, established their proportion as 1:14.47, and not as $14\frac{1}{15}$ as some pretend.

Upon this revolution in the proportion, it is very plain that nobody in Germany, who had the choice of paying either in Silver or Gold, would any more pay in Silver Coin, at the regulation of Leipzig, because they could pay cheaper in Gold.

The same confusion has introduced itself in England. Nobody there, since 1728 (at which time the proportion of their Coin was, with great inaccuracy, set at 1 to 15.2), will pay in Silver Coin, at standard weight; and as the regulations of the English mint are peremptory; as the mint cannot pay for Silver bullion above the fixed regulation, nor coin of any of that species below the standard; the consequence has been, that no more Silver has been coined; and that the specie of the nation is entirely composed of Gold, excepting the small quantity of old Silver Coin, which, by being worn light, is now reduced to the proportion of the Gold.

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(Pages 254, 255.)

It frequently happens (no doubt) that one of the species is carried off by nations who set a higher value upon it. This is unavoidable; but there is but one case in which it can prove hurtful, to wit, when the metals in the Coin are not proportioned to the price of the market in the place where one of the species is bought up. This is the case in England, and has been so these forty years at least; and by this it has happened that they have sold their Silver Coin for a quantity of Gold Coin, which in their own market was not worth the Silver which was bought with it. This is an evident loss; but were the Gold imported in return for the Silver of the same intrinsic value in the English market, there would be

no more loss to England to have sold their Silver than there would be a loss to those who had bought it to have parted with their Gold.

It is by the force of this principle that the proportion of the metals is so uniform in the European markets; because when the taste, fancy, or occasions of a particular nation make them demand one of the metals more than formerly, other nations immediately change with them; because what the one prizes the other undervalues. This exchange satisfies both parties, and when both are satisfied the demand ceases, and the proportion becomes the same in both nations. The reason is plain: The demand raises the price of the undervalued metals sought for, in the one market; and when it is carried to the other market the supply it furnishes to those who sought for it diminishes its value; consequently the new proportion is established in the middle between the two old.

MEASURES FOR MAINTAINING THE COIN AT STANDARD WEIGHT, 1774.

13 George III., c. 71, 1773.

AN ACT for the better preventing the counterfeiting, clipping, and other diminishing the gold coin of this kingdom.

Whereas the preventing the currency of clipped and unlawfully diminished and counterfeit money is a more effectual means to preserve the coin of this Kingdom entire and pure, than the most rigorous laws for the punishment of such as diminish or counterfeit the same; and whereas by the known laws of this Kingdom, no person ought to pay, or knowingly tender in payment, any counterfeit or unlawfully diminished money, and all persons may not only refuse the same, but may and by the ancient statutes and ordinances of this Kingdom, have been required to destroy and deface the same and more particularly the tellers in the receipt of the exchequer, by their duty and oath of office, are required to receive no money but good and true, and to the end the same might be the better discerned and known by the ancient course of the said receipt of the exchequer, all money ought to be received there by weight as well as tale; and whereas by an act passed in the ninth and tenth years of the reign of the late King William the third (intituled, an act for the better preventing the counterfeiting, clipping, and other diminishing the coin of this Kingdom) provisions are made for preventing the currency of clipped and counterfeit silver money, but respecting the gold money no provision is thereby made; be it declared and enacted by the King's most excellent Majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, That it is and shall be lawful to and for any person to whom any gold money shall be tendered, any piece or pieces whereof shall be diminished, otherwise than by reasonable wearing, or that by the stamp, impression, colour, or weight thereof, he shall suspect to be counterfeit, to cut, break, or deface such piece or pieces; and if any piece so cut, broken, or defaced shall appear to be diminished (otherwise than by reasonable wearing) or counterfeit, the person tendering the same shall bear the loss thereof; but if the same shall be of due weight and appear to be lawful money, the person that cut, broke, or defaced the same shall and is hereby required, to take and receive the same, at the rate it was coined for, and if any question or dispute shall arise whether the piece so cut be counterfeit or diminished in manner aforesaid, it shall be heard and finally determined by the Mayor, Bailiff or Bailiffs, or other chief officer of any city or town corporate, where such tender shall be made; and if such tender shall be made out of any city or town cor-

porate then by some justice of the peace of the county inhabiting or being near the place where such tender shall be made; and the said mayor or other chief officer, and justice of the peace shall have full power and authority to administer an oath as he shall see convenient to any person for the determining any questions relating to the said piece.

II. And be it further enacted by the authority aforesaid, That the tellers, at the receipt of His Majesty's exchequer, and their deputies and clerks, shall, and they are hereby required, to cut, break, or deface, or cause to be cut, broken, or defaced, every piece of counterfeit or unlawfully diminished Gold Money that shall be tendered in payment to them, to the use of His Majesty, his heirs or successors, or for, or in respect of any part of the revenue, aids, impositions, duties, or taxes, of His Majesty, his heirs or successors; and the better to discover Gold Money that is counterfeit or unlawfully diminished, from that which is good and true, the said tellers, and their respective deputies and clerks, shall weigh, in whole sums or otherwise, all Gold Money by them received; and if the same, or any piece thereof, shall, by the weight, or otherwise, appear to be counterfeit or unlawfully diminished, the same shall not be received by or from them in the said receipt of the exchequer, nor be allowed them upon their respective accounts.

RESOLUTIONS IN THE COMMONS RESPECTING THE STATE OF THE GOLD COIN.

(From Parliamentary History of England, Volume 17th, 1774, Page 1327.)

May 10. Sir Charles Whitworth reported, from the committee of the whole House, to whom it was referred to take into consideration the state of the Gold Coin of this Kingdom, the following Resolutions:

1. "That the gold coin of this realm has been greatly diminished, by clipping, filing, and other evil practices, particularly of late years in violation of the laws of this realm and to the great detriment of the public; so that the several pieces of unlawful diminished gold coin which have been received into the Bank at the Mint price, in pursuance of the directions from commissioners of his Majesty's Treasury, of the 23rd of July, 1773, amounting in value to the sums of £3,418,960 15*s.* 4*d.* have been found to be deficient, upon an average, at least nine per cent.

2. "That part of such of the gold coin now remaining in circulation, as was coined before the accession of his present Majesty, is deficient in weight £5 per centum; and that a part of so much thereof as hath been coined during the reign of his present Majesty, before the 1st of January, 1772, is deficient two and an half per centum.

3. "That it has been a practice to export and melt down the new and perfect gold coin soon after it is issued, for private advantage, to the great detriment of the public.

4. "That while pieces of gold coin, differing so greatly in weight, are allowed to be current under the same denomination, and at the same rate and value, great quantities of the new and perfect pieces will continue to be exported and melted down: and, there is reason to apprehend, will be recoined into pieces the most deficient that are allowed to be current.

5. "That, to prevent the mischiefs to which the public are thus exposed, it is proper that all guineas, weighing less than 5 pennyweight eight grains; and all half-guineas, weighing less than 2 pennyweight sixteen grains; and all quarter-guineas, weighing less than one pennyweight eight grains, be called in and be recoined.

6. "That the said guineas, half-guineas and quarter-guineas be called in by degrees; and that it is proper to proceed therein as fast as the occasions of circulation will allow, and as the officers of the mint are able to recoin the same.

7. "That, for the purpose of calling in the said guineas, half-guineas, and quarter-guineas, it is proper that certain days be appointed, after which they shall not be allowed in payments, or to pass, except only to the collectors and receivers of the public revenues, or to such persons as shall be appointed by his Majesty to receive and exchange the same; and that certain other days be appointed, after which they be not allowed to pass in any payment whatsoever, or to be exchanged in manner beforementioned.

8. "That all such guineas, half-guineas, and quarter-guineas, be recoined according to the established standard of the mint, both as to weight and fineness.

9. "That the public bear the loss arising from the deficiency and recoinage of the said guineas, half-guineas and quarter-guineas, provided such deficiency does not exceed the rates settled by the order of the commissioners of his Majesty's Treasury of the 23d of July last; and provided they be offered in payment to the receivers or collectors of the public revenue, or are brought to such person or persons, as shall be authorized to receive and exchange the same, within the times to be appointed according to the foregoing resolutions.

10. "That the methods of coining hitherto invented, for the purpose of preventing the unlawful diminishing of the gold coin of this realm, by clipping, filing, and other evil practices, and the laws hitherto enacted for the punishment of those that are guilty thereof, have been found to be ineffectual.

11. "That the only effectual method of preserving the Gold Coin from being unlawfully diminished, and of preventing the mischiefs to which the public is thereby exposed, is, that the said coin should be current by weight as well as by tale.

12. "That the most convenient method of making the gold coin so current is that every person who shall receive in payment any piece or number of pieces of such coin deficient in weight, shall be entitled to receive a compensation for the said deficiency from the person tendering the said coin.

13. "That such compensation be at the rate of one half guinea for every sixty-five grains, and in the like proportion as near as conveniently can be, for every grain under sixty-five, according to such table or tables as his Majesty shall cause to be published, from time to time for that purpose.

14. "That considerable quantities of the old silver coin of this realm, or silver coin purporting to be such, greatly below the standard of the Mint in weight, have been lately imported into this kingdom.

15. "That it be made unlawful to import into this kingdom, or Ireland, from foreign countries, any of the silver coin of this realm, or any silver coin purporting to be such, that is not of the established standard of the mint in weight and fineness; and that the same, if seized, be made subject to confiscation.

16. "That for a limited time, the silver coin of this kingdom be not allowed to be legal tender in the payment of any sum exceeding 50*l.*, but according to its value by weight, after the rate of 5*s.* and 2*d.* per ounce.

17. "That there be made, under the direction of the officers of his Majesty's Mint, one weight of a guinea, and one weight of a shilling; and also other weights, being parts and multiples of the said guinea weight and shilling weight, according to the established standard of this realm; which several weights, after they have been ascertained by the reports of the said officers, and approved by his Majesty in council, shall be the standard weights for regulating and ascertaining all weights to be made use of for weighing the Gold and Silver Coin of this realm, and shall be lodged in the custody of an officer, to be appointed for that purpose, with a salary to be paid out of the coinage duties; and any weights which shall from thenceforth be made use of for weighing the Gold and Silver Coin of this realm, shall not be reputed and taken to be true and perfect unless they have been first compared with the said standard weights; and, in testimony thereof, marked by the officer to whom the custody of the said standard weight shall be entrusted."

The said Resolutions were agreed to by the House. And it was resolved that an Address be presented to his Majesty, upon the 1st, 2nd, 3d, 4th, 5th, 6th, 7th, 8th and 9th Resolutions: and also, That a Bill or Bills be brought in pursuant to the 14th, 15th, 16th and 17th Resolutions.

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14 George III, c. 42.

AN ACT to prohibit the importation of light silver coin of this realm, from foreign countries, into Great Britain and Ireland; and to restrain, the tender thereof beyond a certain sum.

Whereas considerable quantities of old silver coin of this realm, or coin purporting to be such, greatly below the standard of the mint in weight, have been lately imported into this kingdom, and it is expedient, that some provision should now be made to prevent a practice which may be carried on at this time, to the very great detriment of the public, be it therefore enacted by the King's most excellent majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, That from and after the first day of June, one thousand seven hundred and seventy four, all silver coin of this realm, or any money purporting to be the silver coin of this realm, which is not of the established standard of the mint in weight and fineness, shall be prohibited to be imported or brought into the kingdoms of Great Britain or Ireland from for-

eign countries; and if any silver coin being, or purporting to be, the coin of this realm, exceeding in amount the sum of five pounds, shall be found, by any officer, of his Majesty's customs, on board any ship or vessel, in any port, harbour, haven, or creek, or in any boat, barge, or other vessel upon the water, within the said kingdoms, or in the custody of any person coming directly from the water side, or upon the information of one or more person or persons in any house, shop, cellar, warehouse, room, or other place, on a search there made in such manner as in and by an act made in the fourteenth year of the reign of the late King Charles the Second, intituled, An act for preventing frauds, and regulating abuses, in his Majesty's customs, is mentioned and directed, if such search is made in Great Britain, or according to the manner directed by any act of parliament made in Ireland, relative to the searching for uncustomed and prohibited goods in that kingdom, if such search is made there, it shall and may be lawful for such officer to stop and put such coin in his Majesty's custom-house warehouse, in the port next to the place where such stop shall be made: and if it shall appear, upon examination there, to the collector or other principal officer of the customs, of the said port or place, that such silver coin is of the established standard of the mint in weight and fineness, the same shall, upon demand, be forthwith delivered to the owner or proprietor thereof, without fee or reward; and such officer or officers, or any person or persons acting in his or their aid or assistance, shall not be liable to any action, suit, or prosecution, for searching, stopping, or detaining the same; but if such coin, or any part thereof, shall be less in weight than the established standard of the mint, that is to say, at and after the rate of sixty-two shillings to every pound troy, whether the same be in crowns, half-crowns, shillings, sixpences, or pieces of a lower denomination, or of less fineness than eleven ounces two-pennyweight of fine silver, and eighteen-pennyweight of alloy in the pound troy, the same, or such part thereof, as shall be deficient either in weight or fineness, as aforesaid, shall be forfeited, and shall and may be seized by any officers of the customs, and prosecuted in any court of record in Westminster or Dublin, or in the court of exchequer at Edinburgh; or if such coin shall not amount in value to the sum of twenty pounds, in that case, the same shall and may be prosecuted in a summary way, before any two of his Majesty's justices of the peace for the county, city, or place, where such seizure shall be made, at the election of the commissioners of his Majesty's customs in Great Britain, or the commissioners of revenue in Ireland, or any three or more of them respectively, in such and the like manner, and by the same rules and regulations, as any forfeiture incurred by any law of the revenue may be sued for and recovered in the Kingdom of Great Britain or Ireland, respectively; and after condemnation, the same shall be melted down, cut, or otherwise defaced, in such manner as the said commissioners of his Majesty's customs and revenue respectively shall direct; and one moiety of the produce arising by the sale thereof, after being so melted down, cut, or defaced (first deducting the charges of prosecution and sale) shall be to the use of his Majesty, his heirs and successors, and the other moiety to such officers of the customs as shall sue and prosecute for the same.

II. And be it further enacted by the authority aforesaid, That no tender in the payment of money made in the silver coin of the realm of any sum exceeding the sum of twenty-five pounds, at any one time, shall be reputed in law, or allowed to be a legal tender within Great Britain or Ireland, for more than according to its value by weight, after the rate of five shillings, and two-pence for each ounce of silver; and no person to whom such tender shall be made shall be any way bound thereby or obliged to receive the same in payment, in any other manner than aforesaid; any law, statute, or usage, to the contrary notwithstanding.

III. And be it further enacted by the authority aforesaid, That this act shall continue in force until the first day of May, one thousand seven hundred and seventy-six, and from thence to the end of the then next session of parliament.

Title of 14 George III, c. 70.

An act for applying a certain sum of money for calling in and recoining the deficient gold coin of this realm; and for regulating the maner of receiving the same at the bank of England; and of taking there an account of the deficiency of the said coin, and making satisfaction for the same; and for authorizing all persons to cut and deface all gold coin that shall not be allowed to be current by his Majesty's proclamation.

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14 George III, c. 92.

AN ACT for regulating and ascertaining the weights to be made use of in weighing the gold and silver coin of this Kingdom.

MOST GRACIOUS SOVEREIGN:

Whereas some provision is necessary for regulating and ascertaining, according to the established standard of your Majesty's mint, the weights to be made use of in weighing the gold and silver coin of this realm, and it is highly expedient, for the prevention of frauds, that the use of all other weights, which are not just and true, according to the said standard, should be disallowed; may it please your Majesty that it may be enacted; and be it enacted by the King's most excellent Majesty, by and with the advice and consent of the lords, spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, That it shall and may be lawful for the warden, master, and comptroller, of his Majesty's mint, with the assistance of the King's assay-master, and they are hereby authorized and required, without delay, to make, or cause to be made, one weight of the piece of gold coin of this realm commonly called a guinea, and also one weight of the piece of silver coin of this realm called a shilling, according to the established standard of his Majesty's mint, and also other weights, being parts and multiples of the said guinea weight and shilling weight respectively; which weights, together with their report of the truth and accuracy thereof, they are hereby required to transmit to the clerk of his Majesty's council in waiting, in order to be laid before his Majesty in council; and in case the said weights shall be approved of and confirmed by his Majesty in council, the same shall be reputed and accepted in law to be the standard weights of the gold and silver coin of this realm respectively, and the same shall be lodged in the joint custody of the warden, master, and comptroller of his Majesty's mint for the time being.

II. And be it further enacted by the authority aforesaid, That the said warden, master, and comptroller, of his Majesty's mint, with the assistance of his Majesty's assay master, shall make, or cause to be made, in like manner, exact duplicates, or copies of the said standard weights of a guinea, and of a shilling, and of the parts and multiplies thereof, as aforesaid; and if any of the said duplicates, or copies, shall hereafter, by any accident, be destroyed, lost, or impaired, the warden, master, and comptroller, of his Majesty's mint for the time being, with the assistance of the King's assay master, are hereby authorized and required in like manner, to make, or cause to be made, other exact duplicates, or copies, of such of the said standard weights of a guinea, and of a shilling, and of the parts and multiples thereof, as shall happen to be destroyed, lost, or impaired; all which duplicates, or copies, shall be laid before his Majesty, his heirs and successors, in his or their privy council, in manner hereinbefore directed; and in case the same shall be approved of and confirmed by his Majesty, his heirs and successors, in his or their privy council, they shall then, by the said master, warden, and comptroller, be delivered to and lodged in the custody of an officer, to be from time to time appointed by his Majesty, his heirs or successors, for that purpose, under his or their sign manual, during his or their royal pleasure, with a salary not exceeding the yearly sum of two hundred and fifty pounds, to be issued and paid by the warden of his Majesty's mint, out of the monies arising by the coinage duties.

III. And be it further enacted by the authority aforesaid, That it shall and may be lawful to and for the warden, master, and comptroller, of his Majesty's mint, and they are hereby authorized and required, once, or oftener, in every year, by warrant under their hands, to summon and require such officer, so to be appointed by his Majesty, to appear before them and produce the said duplicates, or copies, of the said standard weights of a guinea, and of a shilling, and of the parts and multiples thereof, as aforesaid, and the same to examine and compare with the standard weights hereinbefore directed to be lodged in the custody of the warden, master, and comptroller of his Majesty's mint for the time being.

IV. And be it further enacted by the authority aforesaid, That from and after the thirty-first day of December, one thousand seven hundred and seventy-four, all weights to be made use of for weighing the said gold and silver coin, shall be regulated and ascertained by the duplicates, or copies, of the said standard weights of a guinea, and of a shilling, and of the parts and multiples thereof respectively, lodged in the custody of the officer before mentioned; and after having been tried and compared therewith, and found to be just and true, shall, in testimony thereof, be marked by the said officer with a stamp or mark, or stamps or marks to be approved of by the master of his Majesty's mint, which stamps or marks the said officer is hereby directed to provide: and, in order that the impression or impressions made thereby may be known to all his Majesty's subjects, the said officer is hereby also directed to publish a description of the same, by advertisements, in the London Gazette, three times at least before the said thirty-first day of December, one thousand seven hundred and seventy-four; and the said officer is hereby required, upon application made to him at all seasonable hours, to stamp or mark, in manner aforesaid, all weights to be used for weighing the said gold and silver coin, which shall be brought to him for that purpose, and which he shall find to be just and true according to the said duplicates or copies, of the standard weights of a guinea, and of a shilling, and of the parts and multiples thereof respectively, hereby directed to be lodged in his custody, without fee or reward, and without wilful delay: and from and after the said thirty-first day of December, one thousand seven hundred and seventy-four, no other weights but such as shall be just and true, according to the weights with and by which they are hereby directed to be compared and ascertained, and shall be marked in manner before mentioned, shall be reputed or accepted in law to be true, or of any effect for determining the weight of the gold or silver coin of this realm.

V. And it is hereby further enacted, That if any person or persons shall forge or counterfeit any stamp or mark, to resemble any stamp or mark provided or used in pursuance of this act, or shall counterfeit it or resemble the impressions of any such stamp or mark, as aforesaid, or any such weight or weights, as aforesaid; or shall utter, vend, or sell, any such weight or weights with the impression of such counterfeit stamp or mark thereupon, knowing the same to be counterfeit; or shall wilfully increase or diminish any such weight, after it has been stamped or marked in manner before directed; or shall make use of any such weight in weighing the gold and silver coin of this realm, knowing the same to have been so increased or diminished; every such person and persons shall for every such offence, upon conviction thereof, before any two of his Majesty's justices of the peace of the county, division, or place, where such offence shall be committed, who are hereby authorized and directed to enquire into the same, forfeit and pay any sum not exceeding the sum of fifty pounds, at the discretion of the said justices; one moiety thereof to go to his Majesty, his heirs and successors, and the other moiety to him that shall inform, or sue for the same; and on default of payment, it shall and may be lawful for such justices of the peace to commit every such offender to the common gaol, or house of correction, for any time not exceeding three months.

VI. Provided always, and be it enacted, That nothing herein contained shall extend, or be construed to extend, to take away, or abridge any rights, powers, privileges, or profits, granted by his late majesty King James the First, by letters patent, in the twelfth year of his reign, to the master, warden, and commonalty of the mystery of

founders of the city of London, and which they may lawfully claim or enjoy, with respect to the sizing and marking of all manner of brass weights made or wrought within the said city of London, or within three miles compass thereof, or which shall be sold, uttered, or kept for sale, within the said city of London, or three miles compass thereof.

VII. Provided, nevertheless, that the weights hereinbefore directed to be made use of for weighing the Gold and Silver coin of this realm, after having been sized and marked according to the directions of the said charter, be carried to be ascertained and marked in manner hereinbefore directed, by the officer appointed by his Majesty for that purpose, in pursuance of the powers given by this act.

Title of 15 George III, c. 30.

An act for allowing the officer appointed to mark or stamp the weights to be made use of in weighing the Gold and Silver coin of this kingdom, in pursuance of an act made in the last session of parliament, to take certain fees in the execution of his office.

Title of 16 George III, c. 54.

An act to continue an act, made in the fifth year of the reign of his late Majesty King George the Second (intituled An act to prevent the committing of frauds by bankrupts;) and also an act, made in the fourteenth year of the reign of his present Majesty, (intituled An act to prohibit the importation of light Silver coin of this realm from foreign countries into Great Britain or Ireland, and to restrain the tender thereof beyond a certain sum.)

Title of 18 George III, c. 45.

An act to continue the several laws therein mentioned, relating to the allowance upon the exportation of British-made gunpowder; to the further encouraging the manufacture of British sail cloth and to the duties payable on foreign sail cloth; to the granting a liberty to carry sugars of the growth, produce, or manufacture, of any of his Majesty's sugar colonies, directly of foreign parts, in ships built in Great Britain, and navigated according to law; to the further punishment of persons going armed or disguised, in defiance of the laws of customs or excise; to the prohibiting the importation of light Silver coin of this realm from foreign countries into Great Britain or Ireland, and to restrain the tender thereof beyond a certain sum; to the granting a bounty upon flax seed imported into Ireland; to the better regulating of pilots for the conducting of ships and vessels from Dover, Deal, and Isle of Thanet; and to revive and continue so much of an act made in the sixteenth year of his present Majesty's reign, as relates to allowing the exportation of certain quantities of wheat, and other articles to his Majesty's sugar colonies in America.

[This re-enactment of 14 George III, c. 42, expired on May 1, 1783; but that statute was later revived by 38 Geo. III, c. 59. (See page345).

THE AMOUNT OF SILVER COINED IN ENGLAND IN THE XVIIITH CENTURY.

[The amount of Silver coined in England was exceedingly small.

In the absence of precise information on this head, it would be safe to assume that the amount coined between 1717 and 1798 was less than three-quarters of a million pounds sterling.]

Extract from Lord Liverpool, Treatise on the Coins of the Realm, 1805, page 185.

"The nominal value of the Silver Coins which were coined at the general recoinage in the reign of William III, and those which have been occasionally coined since that period, amount to 8,076,092£."

[In another passage, reprinted p. 340, Lord Liverpool states that the Silver coined between 1717 to 1760 amounted only to £584,575 14*s.* 11½*d.*]

From Ruding's Annals of the Coinage, vol. ii, page 477.

"In 1760, the date of the accession of George III, the Coinage was found to be in a very imperfect state.

The crown pieces had almost wholly disappeared, though there had been coined, at the general recoinage in the reign of King William III, and occasionally afterward, a number that amounted in value to £1,553,047.*

The half-crowns which remained, and which were to a certain degree defaced and impaired, were by no means adequate in number to the purposes for which they were intended. Of those had been coined, during the same period, to the value of £2,329,370.

The Gold Coins had not been diminished so much, but they were rapidly approaching that state which, in the year 1773, compelled His Majesty's ministers to take some steps to prevent the entire ruin of that part of the Coinage."

* The total Coinage of Silver, during that period of about 64 years, was £8,076,092, the far greater part of which had been either much diminished, or consigned to the crucible.

[Ruding also mentions, page 478, the coinage of an insignificant quantity of Silver in 1762, 1763.]

(From page 498.)

"In this year a feeble attempt was made to supply the want of Silver Money by a coinage of that metal. But it appears as if the directors of mint affairs had exhausted all their powers in the restoration of the Gold coins, for after an issue of about seventy or eighty thousand pounds in shillings and sixpences, the coinage of Silver was stopped.

In this year the deficiency of the old Silver coins was ascertained by experiments made by the officers of the mint, which clearly proved the necessity of that metal, and the impolicy of ceasing to coin after so limited an issue had taken place.

According to these experiments it appears that—

$12\frac{3}{10}$ Crowns, 27 Half-Crowns, $78\frac{1}{10}$ Shillings, $194\frac{6}{10}$ Sixpences,	were requisite to make up a Pound Troy, instead of	$12\frac{4}{10}$ Crowns [*sic*], $24\frac{8}{10}$ Half-Crowns, 62 Shillings, 124 Sixpences,	as issued from the mint."

THE AIM OF ENGLAND'S MONETARY LEGISLATION.

1773–1799.

[EXTRACT FROM A TREATISE OF THE COINS OF THE REALM; IN A LETTER TO THE KING. OXFORD, 1805. BY CHARLES, EARL OF LIVERPOOL. 4to, 266 pp.]

TO THE KING:

SIRE:

It is a part of Your Royal Functions to attend to the state of the Coins of Your Realm, and to cause every defect to be removed, which mistaken policy has introduced, or the waste of time may have wrought in them.—It is also, I well know, Your Majesty's earnest wish and inclination, on this and on every other occasion, to consult the convenience, and provide for the interests of your People.—For these reasons I have thought it my duty to address to Your Majesty a Treatise, which has for its object, to explain and elucidate the true principles of Coinage; to point out the errors committed in this respect under the authority of Your Royal Predecessors, and to suggest the best methods of preventing such evils for the future.

At Your Majesty's accession to the Throne in 1760, the Coins of Your Realm were in an imperfect state;—those made of Silver, in particular.—The Crown Pieces had almost wholly disappeared; though of these, there had been coined, at the general Recoinage in the reign of King William, and occasionally afterwards, a number that amounted in value to 1,553,047*l.** Great numbers of the Half Crowns had in like manner disappeared; and the number that remained was by no means adequate to the purposes for which they were intended; though, of these, there had been coined, during the before-mentioned period, a number that amounted in value to 2,329,570*l.*—Such of the Half Crowns as remained in circulation were, in a certain degree, defaced and impaired.—

*According to an estimate made by the Officers of the Mint from the accounts in their possession.

The Silver Coins, which were then principally current, consisted of Shillings and Sixpences. The number of Shillings, that had been coined during the same period, amounted in value to 3,232,680*l.*—The number of Sixpences and pieces of smaller denomination, so coined, amounted in value to 960,795*l.*—The Shillings had, at this time, lost almost every mark of impression, whether of head, or of reverse, or of inscription, or of graining at the edges. The Sixpences were in a worse state. I do not know of any account that was taken of their deficiency in weight at this period; but, from experiments that have since been made, I think I may assert, that the deficiency of the Shillings, even then, amounted to $\frac{1}{6}$ of their original weight; and that of the Sixpences to at least a Fourth.*

The causes of the very impaired and deficient state of these Silver Coins were, that the heavy pieces had in general been melted down or exported, and the remainder diminished by wear or by filing. A considerable profit was derived from this last practice, and very little Silver Bullion had been brought to the Mint to be coined; for the value of Silver Bullion, as estimated by Your Majesty's Mint, was lower, compared with that of Gold, than the prices at which these metals respectively sold in the market. It appears that from the year 1717 (when Sir Isaac Newton made his report on the relative value of Gold and Silver, as estimated at the Mint, and as sold at the market) to the year 1760, the quantity of Silver, which had been brought to the Mint to be coined, amounted in value only to 584,575*l* 14*s* 11½*d*; a very small supply indeed for so long a period as 43 years, of that species of Coin which is most in currency, and, consequently, is most exposed to deficiency by wear and to loss by other contingencies.

Though the Gold Coin was in a less imperfect state at Your Majesty's accession to the Throne, it was, even then, on the decline: and this decline increased so rapidly, that, in the year 1773, the deficiency in weight of the Gold Coins then in circulation was become very considerable; so that, as soon as any new Gold Coin was brought from the Mint, these perfect pieces were exchanged, or bought up, for the old deficient Coins, and immediately melted down or exported. Indeed, the general deficiency of the Gold Coins in circulation was so notorious, that it was estimated in all our exchanges with foreign countries; and all payments to such countries were enhanced in proportion to the deficiency of these Coins; and such was, at that time, the state of the currency of this country, that there was very little of good or perfect Coin of any metal circulating in it. The evil was so great, that Government found it necessary to take this difficult subject into their immediate consideration, and to endeavour to apply a remedy to it. On this occasion I addressed a Letter to a Noble Lord, who was then Chancellor of Your Majesty's

*In the years 1787 and 1798, experiments were made by the Officers of the Mint, to shew the deficiency of weight, at those times, of the several sorts of Silver Coins. The results of these experiments will be stated hereafter.

Exchequer, suggesting what appeared to me the proper remedy for this evil. I proposed that, with a view to the general reform of the Coins of the Realm, all the deficient Gold Coins should, in the first place, be called in and recoined; that a compensation should be made to the holders of this deficient Gold Coin, under certain limits and restrictions; and that, after this operation had been completed, the currency of the Gold Coin should, in future, be regulated by weight as well as by tale (which was conformable to the ancient laws of this kingdom), and that the several pieces should not be legal tender, if they were diminished, by wearing or otherwise, below a certain weight, to be determined by Your Majesty's Proclamation. Your Majesty was pleased to approve of this advice, and to propose to Your Parliament, on the 13th day of January, 1774, the calling in and recoining all the deficient Gold Coins; and the Chancellor of Your Exchequer opened the whole of this plan to the House of Commons, who approved of the measure, which was carried into immediate execution without any complaint and with great success. The defects, which had previously existed in this species of Coin, were thereby removed; and the regulation, then established, of weighing the Gold Coin, has been the means of preserving it at nearly the state of perfection to which it was then brought. I need not enter into any further detail of the regulations at that time established; as they will appear in the Acts passed, and in the Proclamations issued on that occasion. It is fortunate, that, by this recoinage, the Gold Coin was brought to such a state of perfection, and that so little is now left to be performed for its farther improvement; especially at a time when we are under the necessity of entering on the more difficult task of remedying the deficiencies in the Coins made of other metals.

A difficulty then existed, and continues to exist, which must necessarily be removed, before any plan can be adopted for the improvement of the Silver Coin. I have already observed, that Gold and Silver, in reference to each other, are estimated at your Majesty's Mint at a different value or price, than these metals are generally sold for at the market. As long as this difference subsists, both these metals will not be brought in a sufficient quantity to the Mint to be coined: that metal only will be brought which is estimated at the lowest value with reference to the other; and Coins of both metals cannot be sent into circulation at the same time without exposing the public to a traffic of one sort of Coin against the other; by which the traders in money would make a considerable profit, to the great detriment of Your Majesty's subjects. And this mischievous practice, and the frauds committed in carrying it on, are the more to be apprehended in this country, where the Mint is free;—that is, where every one has a right to bring Gold and Silver to the Mint to be converted into Coin, not at the charge of the person who so brings it, but of the public: for since the 18th Charles II, ch. 3, the charge of coining Gold and Silver has been born by the public, and, contrary to

the practice of most other countries, no seigniorage has been taken. To prevent this evil it is necessary to determine whether there must not be a standard or superior Coin, made of one metal only; and whether the Coins made of other metals must not be made and take their value with reference to this standard Coin, and become subservient to it—and, in such case, of what metal this standard Coin, to which the pre-eminence and preference are to be given, should be made. These are delicate and very difficult questions, which require great consideration. Many persons of acknowledged abilities and great authority have entertained different opinions on this subject. I will not at present farther disclose my sentiments upon it, as a considerable portion of what I intend to write will be employed in the discussion of these questions; and I wish that the opinion which I have formed should appear to be the result of the reasons I shall offer, and of the facts which I shall state:—conscious that any opinion I may deliver cannot derive any weight from my single judgment in opposition to the respectable authorities from which I am forced, on this occasion, to differ.

No farther measure was adopted for the improvement of the Coins of the realm, and particularly of the Silver Coin, though so very defective, for more than twenty years; when, in consequence of an address of the House of Commons, recommending a new Copper Coinage, Your Majesty was pleased, by Your Order in Council of the 7th Feb., 1798, to appoint a Committee, who were to take into consideration the state of the Coins of this kingdom, and the present establishment and constitution of Your Majesty's Mint; and to propose such improvements, in both these respects, as might appear to them to be necessary. Your Majesty was also pleased to insert my name among those members of Your Privy Council who were to form this Committee. Having had some experience in a business of this nature, and having occasionally reflected upon it, I ventured to open to the Committee, at their first meeting, the mode in which I thought they should proceed in the execution of Your Majesty's commands; and I suggested the principles, which, in my opinion, ought to be adopted for the further improvement of the Coins of this realm. The Committee made some progress in their enquiries on this extensive and difficult subject; and, in conformity with the wishes of the House of Commons, they established the principles, on which the Copper Coin should in future be made;—and a certain quantity of Coins, made according to these principles, was sent into circulation, very much to the satisfaction of Your Majesty's subjects:—but obstructions were raised, which prevented the completion of this measure.—At this period, I was seized with a violent disease, which has now confined me to my house, and generally to my couch, for more than four years;—unable to hold a pen, or to turn over the leaves of a book, from which I might derive information. At intervals, however, when I have of late providentially obtained some respite from pain and extreme weakness, I have endeavoured to revise so much as I had before occasionally written;—to arrange

other materials previously collected;—and to reduce the whole to a form not unfit for perusal. A Treatise, written on so abstruse and complicated a subject, by one exposed to great infirmities, must contain some repetitions, slight inaccuracies, and other imperfections. Arrived as I now am on the verge of life, I hasten to present what I have thus written, though not exempt from errors, to Your Majesty, as my last service,—if it shall deserve that name;—in grateful remembrance of the generous protection, which Your Majesty has never ceased to afford me, and of the many and great favours, which You have graciously conferred upon me.

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THE PROHIBITION OF THE COINAGE OF SILVER.*

1798–'99.

(38 Geo. III, C. 59.)

AN ACT to revive and continue, until the first day of January one thousand seven hundred and ninety nine, an act, passed in the fourteenth year of the reign of his present Majesty, chapter forty-two, videlicet, on the thirteenth day of January one thousand seven hundred and seventy-four, intituled, "An act to prohibit the importation of light silver coin, of this realm, from foreign countries, into Great Britain or Ireland; and to restrain the tender thereof beyond a certain sum; and to suspend the coining of silver." (June 21, 1798.)

Whereas an act was passed in the fourteenth year of his present Majesty's reign, intituled, "An act to prohibit the importation of light silver coin, of this realm, from foreign countries, into Great Britain or Ireland; and to restrain the tender thereof beyond a certain sum;" which act was to continue in force for a limited time, and is now

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*A CORRECTION OF CERTAIN EXPRESSIONS OF MR. FEER-HERZOG CONCERNING THE MONETARY HISTORY OF ENGLAND.

In an official report to the Swiss Federal Council upon the Conference—the title of which is given below, with the chapter in question—Mr. Feer-Herzog presents a rejoinder to certain remarks made incidentally by me in connection with certain expressions used by him in the Conference concerning the lessons taught by England's monetary experience before 1816. (See page 81.)

This rejoinder having been reproduced in English in an article on the "Silver Conference and the Silver Question" in the March number of the International Review, it is proper to put on record in English a correction of the erroneous statements contained in it.

In admitting the existence of the statute above reprinted, Mr. Feer-Herzog adds new statements of fact not quite correct, followed by conclusions also partially erroneous, and charges myself with being in error about these facts.

On noticing the passage I addressed a letter to Mr. Feer-Herzog, printed below, supposing that he might prefer himself to make the correction; but as he has not done so, so far as I am informed, it seems improper to leave the statements uncorrected for the French reader. As for the errors charged against myself, suffice it to say, the main fact presented in the documents here printed were digested and inferences established in 1876, in a chapter on the "Example of England," in a work printed in Cincinnati on "Silver and Gold."

For the errors of fact which in the haste of composition were allowed by the learned writer to creep into his allusions to this matter, the preceding pages afford sufficient correction.

QUELQUES OBSERVATIONS DE M. FEER-HERZOG RÉLATIVES À L'HISTOIRE MONÉTAIRE DE L'ANGLETERRE.

[Extraits des Procès-Verbaux de la Conférence Monétaire, p. 99.]

M. Feer-Herzog s'applique ensuite à défendre le monométallisme contre les attaques que le général Walker a dirigées contre lui, et, résumant, à son tour, en quelques traits,

expired; and whereas it is proper, under the present circumstances, that the said act should be revived and further continued; be it therefore enacted by the King's most excellent majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, That, from and after the passing of this act, the said act and all the provisions thereof, shall be, and the same is hereby revived, and shall continue and be in force until the first day of June one thousand seven hundred and ninety-nine.

II. And whereas his Majesty has appointed a committee of his privy council to take into consideration the state of the coins of this kingdom, and the present establishment and constitution of his Majesty's mint, and inconvenience may arise from any coinage of silver until such regulations may be framed as shall appear necessary: and whereas, from the present low price of silver bullion, owing to temporary circumstances, a small quantity of silver bullion has been brought to the mint to be coined,

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l'histoire monétaire de trois grands Etats du monde, il en dégage cette conclusion, que la plupart des perturbations économiques et des désordres qui se sont produits chez eux ont eu pour cause l'existence du double étalon.

L'Angleterre avait d'abord l'étalon d'argent unique. Sous Jacques Ier et sous Charles II, la monnaie d'or alla en se développant; mais, quelque mesure que prît le gouvernement, chaque fois qu'il prétendit établir un rapport légal entre la valeur des deux monnaies, la circulation monétaire se trouva compromise. C'était tantôt la monnaie d'or, tantôt la monnaie d'argent qui s'en allait; il fallait procéder à des refontes coûteuses, ce qui eut lieu notamment sous Guillaume III. En 1717, quand la valeur de la guinée fut fixée à 21 schellings, l'or devint, dans le fait, le seul étalon, et, si l'on veut étudier l'histoire de près, on verra que c'est à partir de cette époque seulement que l'Angleterre a goûté, au point de vue monétaire, un certain repos, sauf, bien entendu, la crise occasionnée par les guerres du premier Empire. Cet équilibre de fait est devenu, en 1816, un équilibre légal; mais la loi n'a fait, en quelque sorte, que consacrer ce qu'avait établi le cours naturel des choses.

[Extraits des Procès-Verbaux de la Conférence, p. 108.]

M. FEER-HERZOG demande la parole pour répondre à M. Horton. Il n'a pas l'intention de prolonger le débat sur le point historique que M. le Délégué des Etats-Unis a traité, à savoir, à quelle époque l'argent a cessé d'être l'étalon légal en Angleterre et aux Etats-Unis, réservant ce litige spécial pour une conversation privée.

[Extrait de "La Conférence Monétaire Américaine tenue à Paris du 10 au 29 Août 1878. Rapport au Conseil Fédéral Suisse par MM. Feer-Herzog et Lardy, Délégués de la Suisse. (Berne, 1878.)]

6. ARGUMENTS AMÉRICAINS. [Page 57.]

Les délégués des Etats-Unis, en répondant aux discours européens, se sont, la plupart du temps, prononcés dans le sens d'une confiance absolue dans la force des lois et des décrets pour maintenir un rapport fixe entre l'or et l'argent. Quoique appartenant les uns à la vie parlementaire ou administrative, les autres à la science, ils sont tous partis du point de vue que, l'argent et l'or ayant été autrefois, selon leur manière de comprendre l'histoire monétaire, simultanément employés dans tous les pays, il appartenait à la Conférence de rétablir l'ancien état des choses.

Le général WALKER, professeur d'économie politique, expose que l'exclusion de l'argent n'a été amenée que par des lois et des décrets, tels que la réforme allemande et la limitation des frappes dans l'Union latine.

Il demande à réagir contre ce qui est l'effet de la simple volonté humaine et soutient qu'il y a peu de pays, même en Europe, assez riches pour se contenter de l'étalon d'or seul. La conséquence de ce dernier, selon lui, est une circulation parcimonieuse d'or avec une forte quantité de billon d'argent.

Aux yeux des Etats-Unis, la démonétisation du stock d'argent dans certains pays est une diminution du stock monétaire du monde tout entier, diminution qui a des conséquences économiques très-graves.

En premier lieu, elle blesse au vif les profits de l'entrepreneur, profits qui, dans la société industrielle moderne, sont l'unique source de la production de la richesse. En second lieu, elle augmente le poids de toutes les dettes et charges publiques et privées.

M. HORTON expose que, la monnaie d'un seul pays n'étant qu'une partie du stock métallique du monde, aucune nation n'a la liberté du choix entre les deux métaux. Il appuie cette assertion d'un grand nombre de faits tirés de l'histoire monétaire et s'appesantit principalement sur la suspension des paiements en espèces par la Banque d'Angleterre en 1797, en faisant remarquer que cette suspension avait coïncidé, pour ainsi dire, avec la démonétisation du métal argent dans le Royaume-Uni en 1798, et que, si l'Angleterre avait conservé l'argent, elle aurait traversé plus facilement, la crise du cours forcé pendant ses guerres avec la France.

Cette allégation de M. Horton repose sur une erreur. Pendant tout le 18me siècle, à

and there is reason to suppose that a still further quantity may be brought, and it is therefore necessary to suspend the coining of silver for the present; be it therefore enacted, that, from and after the passing of this act, no silver bullion shall be coined at the mint, nor shall any silver coin that may have been coined there be delivered; any law to the contrary in anywise notwithstanding.

III. And be it further enacted, That all persons who delivered silver at the mint for the purpose of the same being coined, previous to the ninth day of May one thousand seven hundred and ninety-eight, shall be intitled to receive from the officers of his Majesty's mint, such a sum for each pound weight thereof, as shall be equal to the full value of the coin into which the bullion would have been converted, if the same had been coined according to the regulations of the mint.

IV. And be it further enacted, That this act may be altered, amended, or repealed, during the present session of parliament.

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partir de 1717 où la guinée fut taxée à 21 shellings, la circulation des monnaies d'argent indigènes a été très-faible en Angleterre, et, depuis 1717 jusqu'en 1816, le Gouvernement britannique s'est abstenu de frapper aucune monnaie d'argent.—Durant la période de 1717 à 1774, l'Angleterre avait l'étalon boiteux : une circulation d'or, mais pas de monnayage d'argent, les existences anciennes de ce métal continuant cependant à avoir cours légal. Cet état, qui a beaucoup d'analogie avec celui qui existe actuellement dans l'Union latine, prit fin en 1774, où une loi déclara provisoirement que l'argent n'était plus monnaie légale pour les sommes inférieures à £25. Cette loi provisoire fut prorogée de temps en temps et devint définitive en 1798. M. Horton, dans ses raisonnements, ignore donc la suppression *réelle* du double étalon en Angleterre, qui a eu lieu en 1774, et ne connaît que la suppression de 1798, qui a été un acte de pure forme.*

M. GROESBECK développe "que si, pour plusieurs États, le cours forcé empêche l'action commune et utile, la France et les États-Unis ne sont plus en suspens et peuvent agir de concert."

Selon lui, "il n'y aucun excès d'argent dans le monde; la production des mines diminue; la demande des Indes orientales augmente; l'emploi du métal blanc, par conséquent, n'offre aucun danger. Qu'on rende à l'argent son ancien rang et qu'on sauve les deux métaux par la coopération des nations puissantes."

On voit, par ce qui précède, que la tendance générale des orateurs américains, que nous avons désignés comme appartenant à la droite du parti d'argent dans leur patrie, est de refaire à ce métal une place qu'ils supposent à tort compromise, en faisant intervenir un accord international, tant par rapport à la liberté complète du monnayage de ce métal que sous celui d'une relation de valeur internationale à fixer par rapport à l'or.

Il est remarquable cependant que, quoique cette relation soit revenue dans tous les discours, les délégués américains ont toujours été d'une circonspection extraordinaire chaque fois qu'il aurait fallu aborder la fixation arithmétique du rapport. *Cette question delicate a toujours et constamment été évitée, et aucun orateur, se prononçant en faveur d'un rapport universel, n'a jamais entamé le problème de son chiffre arithmétique.*

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* *Réforme monétaire anglaise de* 1816. *Extraits du discours de M. Wellesley Pole, orateur du Gouvernement dans la Chambre des communes, 30 mai* 1816. (*Hansard, v.* 34, *pag.* 935–965.)

"1. Mais, à partir de la proclamation de 1717, l'or devint de fait l'étalon réel de la valeur, et depuis lors il a toujours été considéré comme tel, non seulement par nous-mêmes, mais encore pour les changes étrangers, et notre monnaie d'or n'a depuis lors éprouvé aucune fluctuation dans son taux de circulation. L'argent, au lieu d'être un étalon, devint en réalité une espèce d'auxiliaire de l'or, considéré comme tel aussi bien dans le pays qu'au dehors.

"2. Frappé du danger de maintenir simultanément en circulation deux métaux précieux reconnus tous deux comme étalons légaux pour toute somme illimitée, le Gouvernement s'est abstenu depuis un siècle de frapper aucune monnaie d'argent; il n'y a donc rien de surprenant à ce qu'une grande quantité de monnaie altérée et étrangère se trouve maintenue dans la circulation.

"3. De ce qui précède, le comité doit conclure que, dans son opinion, l'or était de fait étalon monétaire du pays et qu'il était convenable qu'il en fût ainsi. Il est évident que telle a été l'opinion du Parlement, car, du moment que la monnaie d'or eut été réformée en 1774, on posa un acte déclarant que l'argent n'était une monnaie légale que pour les sommes inférieures à 25 livres. Pour des sommes supérieures, il n'était recevable qu'en qualité de métal à raison de 5 schellings 2 d. l'once. C'était faire de l'or le seul étalon pour une valeur indéterminée et placer l'argent dans la position subordonnée, et, comme on l'a dit antérieurement, d'auxiliaire de l'or. Cette mesure n'a été adoptée en premier lieu qu'à titre d'essai pour un espace de deux ans; mais elle fut renouvelée de temps en temps. L'acte ayant expiré en 1798, feu Lord Liverpool émit l'avis de défendre le monnayage de l'argent jusqu'à ce qu'un comité du Conseil privé, nommé par le roi, eût eu le temps d'examiner et d'approfondir toutes les questions relatives à la situation de la monnaie et des espèces en circulation dans le royaume. Il fut en conséquence rendu un acte qui défendait le monnayage de l'argent, acte qui est encore en vigueur, et, l'année d'après, l'acte de 1774, qui limite à 25 livres les paiements à faire légalement en monnaie d'argent, fut rendu définitif. La monnaie régulière d'argent du pays ayant été écartée ainsi de la circulation, il fut nécessaire de recourir à une circulation de jetons d'argent, qui étaient à peu près de 21% inférieurs à leur valeur nominale."

Voir sur le même sujet:

Lord Liverpool. The Coins of the Realm. Oxford, 1805, pag. 128–129.

1798. Anno regni tricesimo nono George III.

CAP. LXXV.

An act for reviving and making perpetual an act made in the fourteenth year of the reign of his present Majesty, intituled "An act to prohibit the importation of light silver coin of this realm from foreign countries into Great Britain or Ireland; and to restrain the tender thereof beyond a certain sum." July 12, 1799.

Whereas an act was passed in the fourteenth year of his present Majesty's reign, intituled, An act to prohibit the importation of light silver coin of this realm from foreign countries into Great Britain or Ireland; and to restrain the tender thereof beyond a certain sum; which act was to continue in force until the first day of May one thousand seven hundred and ninety-six, and from thence to the end of the then

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Copie d'une lettre envoyée à M. Feer-Herzog.

HÔTEL MEURICE, *Paris, le* 3 *Décembre,* 1878.

MONSIEUR:

* * * * * * *

En feuilletant une brochure intitulée La Conférence Monétaire Américaine, etc., dont vous et M. Lardy, votre collègue dans la Conférence, sont mentionnés comme étant les auteurs, j'ai trouvé mon nom cité à propos de plusieurs observations concernant l'histoire monétaire d'Angleterre du siècle dernier. Ces observations m'ont assez surpris, et il ne me semble que loyal, Monsieur, de vous le dire moi-même.

Vous avez rappelé, Monsieur, à la 4e séance de la Conférence, que pendant le XVIIIe siècle, l'or étant, dans le fait, le seul étalon en Angleterre, ce que vous appelez un "équilibre" de fait, est devenu en 1816 un "équilibre" légal, mais que la loi n'a fait en quelque sorte que consacrer ce qu'avait établi le cours naturel des choses. En citant comme un fait défavorable à l'argent que l'or était le seul étalon Anglais au XVIIIe siècle, et qu'on s'est abstenu de frapper de l'argent, et en faisant une distinction entre ce qui existe *de facto* et ce qui existe *de jure*, vous attribuiez évidemment la condition défectueuse du métal absent avant 1816, à ce que vous appelez "le cours naturel des choses."

En répondant à la même séance à vos observations sur différents sujects, j'ai relevé une partie des inexactitudes qui, selon mon opinion, se trouvaient dans votre exposé de l'histoire monétaire de l'Angleterre en faisant connaître l'existence des lois de 1798–9 interdisant la frappe d'argent à perpétuité. Le papier-monnaie, ajoutais-je, aurait-il subi (dans les premières années du XIXe siècle, avant 1816) le même degré de dépréciation si on n'avait pas ainsi prohibé la frappe de l'argent? Question qui est restée sans réponse et qui a son intérêt spécial en ce sens, que si on lui donne une réponse négative on ne peut citer l'exclusion législative de l'argent en Angleterre, comme un succès.

Vous vous souviendrez que je me suis empressé de dire que votre version de l'histoire était généralement partagée. En vérité, la date 1816 a joué une rôle trompeuse dans la littérature monétaire. Dans la brochure de Novembre je vois avec intérêt que les études auxquelles vous vous êtes livré vous ont mis à même de constater indépendamment la justesse de ma rectification d'Août dernier. Vous admettez au moins que le cours naturel des choses, en ce qui concerne l'exclusion de l'argent de l'Angleterre, a dû céder le terrain, entre 1798 et 1816, à la législation.

Mais malheureusement, vous ne vous contentez pas de rectifier la méprise si généralement partagée; vous allez plus loin, vous vous proposez d'abandonner à la législation les 24 années antérieures, en disant que l'argent n'a cessé d'être monnaie légale que pour les sommes inférieures à £25 après 1774. Mais ce sont ici encore de nouvelles inexactitudes auxquelles vous avez cru devoir associer mon nom. Vous laissez supposer à vos lecteurs, Monsieur, que j'ai attaché, comme un des représentants des Etats-Unis à la Conférence, une importance considérable à ces questions de l'histoire monétaire de l'Angleterre, et vous m'obligez ainsi de vous prier de vous souvenir, Monsieur, que si j'ai, dans la Conférence, fait une excursion sur ce domaine, c'est que j'y ai été provoqué par vous-même, pour faire une rectification dont vous avez déjà reconnu la justesse. En vérité, ce que j'ai dit n'était qu'en passant, et je n'en aurais pas parlé si vous ne l'aviez pas discuté.

D'ailleurs, à propos de l'importance de la question, je vous ferai observer que quand même la prohibition de la frappe de l'argent remonterait à une date beaucoup plus éloigné que 1798, à 1698 par exemple, on aurait toujours le devoir de se poser la même question que vos assertions relativement à l'histoire monétaire de l'Angleterre ont provoqué de ma part, savoir, le billet de Banque d'Angleterre se serait-il déprécié au même degré si l'argent n'eût pas cessé d'être monnayable?

Vous m'attribuez encore, Monsieur, l'expression "démonétisation" au sujet de la pro-

next session of parliament; which said act was, by an act passed in the last session of parliament, revived, amended, and further continued until the first day of June, one thousand seven hundred and ninety-nine: and whereas it is expedient that the said first-mentioned act should be revived and made perpetual; be it therefore enacted by the King's most excellent majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, That, from and after the first day of June, one thousand seven hundred and ninety-nine, the said act and all the provisions thereof, shall be, and the same is hereby, revived, and shall be perpetual.

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hibition de la frappe d'argent en 1798: ce qui peut laisser croire à vos lecteurs qu'il s'agissait d'un stock de monnaie d'argent qu'on voulait vendre. Vous savez aussi bien que moi, Monsieur, que, dans l'espèce, il n'y a pas eu de démonétisation: on a seulement prohibé la frappe et c'est de cette prohibition que j'ai parlé.

Du reste ma meilleure réponse sera dans les citations suivantes de mon livre *Silver and Gold*, que j'avais eu l'honneur de vous adresser en 1877.

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[J'omets ces extraits. Le chapitre de ce livre (imprimé en 1876, 1877) intitulé "L'exemple de l'Angleterre" fait mention des faits principaux de l'histoire monétaire de ce pays depuis 1717, basée entre autres sur les documents présentés dans ce volume.]

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D'autre part, dans un discours lu en Mai 1878, devant l'association américaine de Science Sociale, que je vous ai également envoyé, j'ai aussi signalé le fait, dont je vous ai parlé le même jour de cette quatrième séance de la Conférence, que cette loi de 1774 a cessé d'être en vigueur quelques années plus tard (1783) et aussi le fait qu'en 1769 le parlement avait décrété à perpétuité le monnayage libre et gratuit de l'argent comme de l'or, qui avait été établi le siècle d'avant.

Vous possédez, Monsieur, le grand ouvrage de Ruding que je vous ai raccomandé, et si je ne me trompe, vous m'avez dit que vous possédez un exemplaire du livre de Lord Liverpool. Vous y trouverez, si le sujet vous intéresse, une corroboration des faits que j'avais extraits moi-même des *Acts of Parliament*.

Vous verrez aussi que Mr. Wellesley Pole, dont vous citez un discours dans le Parlement comme autorité, s'est trompé sur le point suivant comme sur les autres. On ne s'est pas abstenu entièrement de frapper de l'argent, bien que l'argent valût à cette période plus que le rapport légal anglais. On en a frappé, selon Ruding, mais (jusqu'au commencement de la hausse de l'or, en 1798, au delà de 15.21) ce fut là un essai de protestation de la part du gouvernement contre "Gresham's Law," essai qui est resté naturellement inutile.

Vous voyez, Monsieur, que le métal argent jouissait pendant le XVIIIe siècle tout entier jusqu'à 1798 du droit du monnayage libre et gratuit, et que ce cours légal *par poids*, entre 1774 et 1783, des monnaies d'argent pour les paiements au-dessus de 600 francs—parceque, vous comprenez, les monnaies d'argent restaient toujours *legal tender* pour toute somme, mais *par poids*, au delà de £25—n'aurait pas eu d'importance pour des pièces frappés au poids complet. Une somme égale eût pu être payée par le même nombre des pièces nouvelles. Quand même la loi de 1774 n'aurait pas expiré, il ne serait pas exact de dire que l'argent avait cessé d'être monnaie légale.

J'entre dans ces questions un peu trop longues de l'histoire monétaire, non seulement pour vous montrer clairement que l'association de mon nom dans la dite brochure à votre version de ce que j'ai dit dans la Conférence et de cette histoire elle-même, est inexacte, mais encore pour vous donner l'occasion de faire disparaître ces inexactitudes de la controverse monétaire.

Les mots cordiales de votre lettre me donnent un plaisir sincère et forment un écho dans mon cœur qui garde toujours un sentiment exceptionnel pour votre beau et brave pays. J'ai eu l'occasion de vous exprimer en personne presque les mêmes idées—en disant que nous sommes aux deux pôles opposés dans nos opinions sur la question monétaire, mais qu'au moins nous avions la même religion—la vérité.

Benedictus qui venit in nomine veritatis, c'est la consigne que je voudrais donner à un coreligionnaire en écrivant ceci. Pour moi comme individu, comme membre de la Conférence, comme Américain, ce serait une tâche desagréable que d'attirer l'attention du public sur le contenu de cette lettre.

En résumé, Monsieur, quant aux inexactitudes qui ne concernent que moi-même, le langage que j'ai tenu à la Conférence ne justifie point la position dans laquelle vous me mettez aux pages 58-9 de votre brochure. Comme cette brochure a un caractère officiel, puisqu'elle est adressée au Conseil Fédéral Suisse, vous jugerez avec moi, Monsieur, que des rectifications précises de ma part n'étaient point inutiles, et j'espère que vous voudrez bien en être l'interprète.

Agréez, Monsieur, l'hommage de mes sentiments les plus dévoués.

S. DANA HORTON.

THE "BULLION REPORT" AND THE SILVER QUESTION.

INTRODUCTORY.

The period of Suspension of Cash Payment in England, a period marked in monetary literature by the solid contribution to it contained in the report of the parliamentary committee of 1810, known as the "Bullion Report," contains, as the reader is aware, the date of a notable departure from the traditional treatment of one of the great money metals at the hands of English law. It was shortly after the restriction of cash payments, that laws were passed (see page 345) excluding Silver entirely from English mints. The attitude assumed with reference to Silver, by this classic document of English monetary science, may therefore not unnaturally be supposed to present some points of exceptional interest, and, indeed, can hardly be neglected in a survey of English policy on this subject.

In calling attention to a certain weakness in the position assumed on this question by the Report, I must, in justice to myself, premise that I do so without prejudice to a sincere respect for the main body of the Report. Albeit the encomium sometimes accorded to this famous document of being the "finest piece of inductive reasoning in the language" must appear a little strained, still, the Bullion Report being not merely a literary production, but a state paper, not merely an idea, but an event, possesses, as the great Petition of Right against the usurpation of Paper Money, a moral dignity which can never, with impunity, be ignored.

Unfortunately for the perfection of their work, the authors of the Bullion Report restricted themselves in their investigations to ascertaining the fact, and analyzing the occasion and effects of an overissue of "paper

pounds sterling," and they omitted to consider with equal thoroughness the general questions of Monetary Policy involved in the maintenance or choice of a metallic pound sterling whose place was being usurped.

Although their commission "to consider the state of the circulating medium," if broadly construed, embraced the whole question of Coinage and Legal Tender, yet the committee seem to have passed this order of questions by, and to have taken the metallic pound sterling for granted.

Forty years later it would hardly have been possible for a Horner or for a Huskisson to have done this thing; but in 1810, so far as the question of the standards was concerned, monetary debate was in its infancy.

The idea that either of the precious metals was to be really excluded from the functions of Money had never presented itself in serious form. In the then structure of the monetary world the heavy metal and the light metal harmoniously performed functions which differ materially from those to-day respectively assigned to them.

As in Asia and in the Americas, so in Europe the monetary edifice was based on Silver. The Pound sterling, the *livre tournois*, before their career of degradation had begun, had been genuine pounds of Silver. The guilder, the marc, the florin, the dollar, were of Silver. In every country the generation which saw the commencement of the nineteenth century had inherited a Silver Unit of Valuation; and in fact, as well as in law, Silver was the basis of the Money of Europe.

In some countries, Silver was the Sole Legal Tender; and in countries which admitted Gold to be a part of the Standard of Payment, it was Gold which was rated by the price in Silver, and not Silver which was rated by the price in Gold: precedent had firmly attached to Gold the liability to alteration of its rate of currency as compared with Silver.

And yet, in countries in which Silver was the single "Standard" Money, in the fullest sense of the word, Gold, as ducat or pistole, in some respects recognised by law as Money, circulated in part as a sort of monetary merchandise, supported in its position through its general recognition as a medium of international exchange.

The existing supply of the metals, both the stock on hand and the annual yield of the mines, arrayed themselves in line with this organization of the monetary demand for them.

In 1810 the weight of Silver in the hands of man was, as far as known, something like forty-five times as great as that of the Gold in use; and, at the rating which the successive governmental elevations of the ratio had established, the Silver in use was worth about three times as much as the Gold in use, and the mines produced the metals in nearly similar proportion.

It was with such a situation as this that monetary doctrine had, during a long period, to do, and it is with a view to this situation alone that the monetary theory and practice of earlier days can be judged.

Some of those who had reasoned upon money, observing the changes of the rate of Gold to Silver in the market (which seem natural enough

when we reflect upon the conflicting coinage policy which obtained among the civilized states), declared that one metal alone ought to be the Standard. But what metal? Evidently, Silver.

The Single Standard of the great English monetary writers of the seventeenth century, of Locke and of Petty, to whom, as ancestors, remote but glorious, Lord Liverpool, the founder of England's anti-silver measures, naïvely refers his policy, was the Silver Standard. The mono-metallist theory of Lord Liverpool's contemporaries, the monetary leaders of France, the Single Standard of Beyerlé, of Claviére, of Mirabeau, of Berenger, was the Silver Standard.

How was it that Lord Liverpool was found in opposition to these names?

In the century which intervened between the utterances of Locke and of Petty and the maturing of Lord Liverpool's policy, peculiar causes had brought about in England a novel and unprecedented monetary situation. In the greater part of the eighteenth century, although Silver was the legal monetary unit, England possessed chiefly a gold currency and Silver could not be had, or if coined would not stay in circulation. (See page 324.) The cause of this situation lay in the fact that the market rate of Silver was higher than the English legal ratio. It was to remedy this evil that in 1717 Sir Isaac Newton had suggested a change to rating Gold about 14.75. The then existing arrangements had allowed the metals, although nominally coined at the rate of 20 shillings to the guinea, equivalent to about 14½ to 1, to be used in payments at 21 shillings 6 pence. The average price of Gold bullion in Silver was about 20*s.* 6*d.*, and of course it was, in consequence, profitable to import Gold and export Silver. Newton's suggestion was that the guinea be made receivable for only 20*s.* 6*d.* or 20*s.* 8*d.* (See page 319.)

Parliament, however, contented itself with the half measure of fixing the guinea at 21 shillings (the ratio of 15.21).

Silver, still underrated in England, finding still its best market abroad, remained there; and thus England came to possess little money other than Gold. This was a degradation of the "Standard of Elizabeth," under which 20 silver shillings were the "Pound Sterling." And yet to reform the Standard, after all the Silver had been replaced by cheaper Gold, was to tell each money-owner in England, "To-morrow the guineas in your pocket shall be worth sixpence less than they are to-day." And this no Parliament undertook to do. Hence throughout the eighteenth century, until in 1798, when Gold rose above 15.21, it did not "pay" to bring Silver to the Tower to be coined, for the ounce of Silver which must go to make up 62 silver pence was worth more than 62 pence of gold, and naturally the only Silver Coins in circulation were old pieces so worn that they had become reduced in weight to equality with gold. This situation, while the causes which brought it about were obvious and familiar, was itself, so far as can be ascertained, entirely a novelty in the monetary experience of important nations.

At that period England possessed in Charles Jenkinson, first Lord Liverpool, former mint-master, one of her most experienced legislators, a monetary theorist. (See page 339.) It was the theory of this distinguished man that this monetary novelty was to become a permanence; this exception in monetary experience was to become a rule; this error was to become a system. In the manifold courses of the great currents of supply and demand, England by this mistake of her currency laws had prepared a receptacle into which an over-large proportion of Gold had drifted; the theory was that this yellow sediment should be retained independently of the driftings of other sediment in the courses of the world's supply and demand.

Although given to the world only in 1805, in his treatise on the Coins of the Realm, the gold-monometallist theory of Lord Liverpool had long been perfected; and in 1798, when first the guinea rose to be worth more than $15\frac{1}{5}$ times its weight in Silver in England (see pages 346 and 366), and when for the first time for two-thirds of a century private persons were bringing Silver to the mint, this theory, in extreme, form was placed upon the statute-book.

It would be too much to ask of Lord Liverpool that he should have appreciated fully the extent to which his theory was revolutionary. Looking back upon it from the vantage-ground of later experience, it is easy to see that, unlike the Silver Standard of Locke, this Gold Standard, although it might be possible in one nation—England's own experience in the eighteenth century supported this view—yet it could not be extended to many nations. The universal adoption of the Gold Standard is admitted to be impracticable to-day, when Australia and California have swelled the world's stock of Gold so that it nearly equals that of Silver. But seventy years ago, when Gold stood to the total of Metallic Money perhaps as one to four, the general adoption of Gold was so far beyond practicability that it is strange it could be thought of at all.* But apart from considerations based upon the relative quantity of the metals in use, there was, as above suggested, a further difference, a radical and fatal difference, between the Gold and the Silver Standard.

A "mono-metallic" policy, whether favoring Gold or favoring Silver, must tend, under existing circumstances, to lower the rating of the excluded metal as compared with that which was favored.

Now Gold was already worth fifteen times its weight in Silver. To favor Gold was to widen the breach between the metals; to favor Silver was to lessen it.

Which course would best serve the convenience of mankind?†

*Mr. Esquirou de Parieu, in a paper written about the time of the Conference of 1867, called attention to the fact that Hermann Hegewisch, a Professor in Kiel, had earlier broached the idea of the general adoption of the Gold standard, but it was in a controversy comparatively obscure.

†If we assume for the sake of argument that this change of the rating of one to the other implied a change of their respective purchasing power, it will be seen that

But waiving the question of mere convenience, what provision did these two opposing Mono-metallic Standards, these two projects of Metrical Unity, invading the *status quo* of the Money of the world, respectively make for the maintenance of that Metal which was to be excluded from the metrical function.

The answer lies upon the surface: Gold is 15 times lighter than Silver, and is the nobler metal. If the Money of the world is to remain the Money of the world at all, or, in other words, if stability, steadiness, permanence, certainty, confidence were to be preserved where, of all regions in the wide range of human interests, they are most needed; and if a policy of directing the support of the Law of Legal Tender of the nations upon one metal alone must be adopted, the support must be given to the metal which needed it most, and not withdrawn from that which needed it most, in order to be given to that which needed it least.

The Gold Standard makes no adequate provision for Silver. The Silver-Token policy is not equal to the task of providing for the heavier metal, and to the observer to-day it is too obvious to need discussion, that demonetized Silver, forcibly made "heavier" than when it was Money, will not freely circulate as a Trade Coin, lightly floating on the surface of the tide of business.

Hence the Gold Standard tended toward disruption, breach, disturbance in the foundation of the world's valuations.

On the other hand, the Single Standard, as it was then known in monetary discussion, was merely the proposition that the existing situation should no longer be complicated by the admission in this or that ratio of the lighter, rarer, dearer metal, upon the same footing as Standard Money, as the more abundant Silver, everywhere a standard, but that it should be reduced to this role of a Trade Coin, of which the ducat, pistole, and other coins afforded a precedent.

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one policy implied a rise of Silver, a fall of Gold; while the other would make Gold rise and Silver fall.

Now in reference to the convenience of mankind "heavy" and "light" are terms purely relative, and hence it may rightly be said (upon the assumption of the change of relative purchasing power above mentioned) that the Silver-favoring policy tended to make Gold heavier, Silver lighter; while the Gold-favoring policy tended to make Gold lighter and Silver heavier.

Which of these two courses would best serve the convenience of mankind?

Does not a glance at the relation between the habits and strength of the human being and the respective weights of metal, which at the existing scale of prices of important commodities man must exert his strength in transporting, warrant the conclusion that (even if the amount of the two metals in value were equal) it is not to be desired that that which was heavy already should become heavier, and that that which was light should become lighter still?

That Gold should become lighter may be a convenience; but that Silver should become heavier, does not the inconvenience overbalance the gain in the lightness of Gold? Which, for example, would the French people prefer to have, the Silver five-franc piece lighter and the Gold five-franc piece heavier, or to add metal to the dollar already cumbrous, and take off metal from the dollar already too light for practical use?

The disturbance of existing conditions is here plainly reduced to unimportance; for the status of neither metal was to be greatly changed; and, in any case, full provision was made for the rejected metal. In fine, although one might decide against this proposition, it is obvious that it had considerable merit. The metal proposed as sole Legal Tender was already the chief Money of the globe, and the legal position which it was proposed to assign to it was an institution of Money of which great States had already had experience, while the discrimination between the legal status of the two metals was *in the same direction with, and not in opposition to,* the intrinsic difference between them.

Such, then, was the Single Standard of Locke, and of his legitimate successors.

As a policy susceptible of general adoption the scheme of Lord Liverpool is obviously unworthy of comparison with that of these elder monometallists, with which he seeks to connect it. In fact, the effort to justify the Gold Standard by recourse to the Silver Standard is, if I may use so strong a figure, analogous to an attempt to prove that because a pyramid will rest securely upon its base it will therefore stand safely upon its apex. Of course Lord Liverpool did not propose the Gold Standard as a scheme which could be applied elsewhere than in England; but at the same time he was apparently unaware that this was a defect that entered into the body of his scheme; he was apparently unconscious of the golden rule of the solidarity of interest of the nations in the Money of the world, as he was mistaken in supposing his theory to be like that of Locke.

Strange to say, modern monetary opinion has allowed itself, to a considerable degree, to reflect this erroneous view, and it has been quite generally believed that in the Gold Standard England has borrowed the substance instead of the shadow of the doctrine of Locke. The late attempt to extend the dominion of Lord Liverpool's theory over the continent of Europe reveals it in its true light.

In such a situation, therefore, as obtained in 1810, when the great authority in England, whose word was monetary law, had thus spoken upon the monetary situation, and in a time of national commotion and of national effort, it is not strange that a special committee of the legislative body, even with a Horner and a Huskisson at their head, should have passed lightly over some of the important problems of Money.

But while it is thus not a damaging charge against the "Bullion Committee" that they did not fully comprehend in its broader aspects the new Monetary System inaugurated by Lord Liverpool's law, it is nevertheless strange that they paid scant attention to the local effects which a coinage of Silver between 1798 and 1810 would in all probability have had upon this very overissue of bank-notes to which they did devote their study, and which they proved to be the cause of great evils under which England suffered.

The primary cause of the stoppage of cash payment in 1797 had

been the withdrawal of specie from circulation in a time of public alarm and of political commotion. It was not till long after 1797 that the taste for inflation grew by what it fed on, at such a pace, that prices were inflated and metal commanded a premium in England's money. This carnival of currency-gambling was not a thing which Englishmen consciously intended or took for granted at the start. The yearly renewals of the bank restriction act were accorded reluctantly and only under the constraint of political necessity. As at the start, so throughout, the efficient cause, the convincing justification, of the continuance of the suspension of cash payments was the lack of specie in the circulation. The question arises naturally, therefore, whether, if some millions of pounds sterling of specie could have been added to and maintained in the circulation *in time*, the continuance of the restriction could not, by forces then in existence, have been to a large extent prevented; or, again, whether, if there had been a full circulation of Silver specie, the overissue of bank-notes would have reached its portentous height? In suggesting that these questions must be answered in favor of Silver, I call attention to the fact that, as the report itself shows, these bank-notes which were issued in excess were chiefly *small* notes. After an average issue by the bank between 1787–1797 of notes for 10 million pounds, and none of them under five pounds, the year 1810 found a circulation of only 14 millions over five pounds, but of 5,800,000 under five pounds. This phenomenon was presumably repeated in the circulation of the country banks. It was this novelty, the issue of notes under five pounds, which was especially held justified by the absence of specie.

As far as the question of the use of Silver is concerned, the modern objection to the "heaviness" of Silver was then hardly effective. An examination of the literature of that time will fail to reveal any of that prejudice against Silver which of late years has sought to obtain acceptance for itself as an "economic fact." Again, England actually felt itself hampered from this lack of Silver. Silver was actually at times at a premium above gold, and at a very high premium, in spite of the coexistence of a premium of Gold bullion over Silver bullion. It is a very strange and very suggestive fact that of all persons in the world Lord Liverpool himself prepared an indictment against the policy which was responsible for this absence of Silver, while Mr. Magens, who was a member of the Bullion Committee, observed that the lack of small Silver was to be lamented.*

* Of this issue of Spanish dollars Lord Liverpool speaks as follows (p. 194, Coins of the Realm): "The blame, if any such is to be imputed, falls not on those who permitted these dollars to be issued, but on those who neglected to supply Your Majesty's subjects with a sufficient quantity of legal Silver Coins to be employed in those payments for which these dollars now pass. But not only Your Majesty's sailors and your own artificers are in want of legal Silver Coins; the laborers in every part of the country, and the manufacturers in the great and populous towns of this Kingdom, and all your good people in every part of it, suffer equally from the want of them (page 185). The quantity of legal Silver Coin now in currency is certainly far too

The fact is that some million pounds sterling worth of Tokens and of Spanish dollars, stamped with the effigy of George III, were put into circulation by the banks; but, as Lord Liverpool observes, they were not Legal Tender. It is safe, then, to say that so far from there being a popular objection, there was in fact a popular desire for the presence of a very considerable additional amount of Silver in the circulation.

Would this overissue of notes under £5 have taken place had an abundance of Silver been in circulation?

It will naturally, however, be asked at once, Could this Silver have been obtained? This question may perhaps be conveniently answered by a counter interrogatory: Would not the stock of Silver which England did hold as merchandise have been sufficient, if properly used, in large part to relieve the want of specie (and that without a corresponding absorption of capital or loss of interest)? The quantity thus held was by no means small. It seems, in fact, safe to say, however strangely the statement may conflict with preconceived opinions, that in England's arduous struggle with Napoleon it was Silver which mainly served England as the "sinews of war." If we are to confide in the correctness of the exhibits of the Bullion Report, the Bank of England between 1797 and 1810 sold some 80 millions of dollars' worth of Silver—65 millions in dollars, 15 millions in bars;—of the Money which England sent out to pay for subsidies and land troops in the war of 1805–1810 about 92 per cent. was Silver;—and about 89 per cent. of the export of the precious metals noted in the custom-house in the former period was Silver. It may, of course, be said, these sums do not represent the actual proportions of the metals used, because guineas and the Gold of melted guineas were exported clandestinely on account of the law inflicting a penalty for their exportation. But would this regulation have affected the action of the Government itself, or did it influence the action of the paymaster-general, who exported these 33 millions of dollars' worth of Silver?

Again, it may be objected, "this Silver was in London only on transit." But was not the Gold there on transit also? Would not the specie

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small for the wants of commerce, particularly of the retail trade and for the commerce of your people. (Page 186.) The total value of all the legal Silver Coins in circulation cannot, therefore, according to this estimate, exceed £3,960,435; it is probably very much less. (Page 188.) Sometimes even a premium is given for them."

In "An Inquiry into the Real Difference between Actual Money (consisting of Silver and Gold) and Paper Money," etc., by Magens Dorrien Magens, Esq., London, 1804, may be found the following passage:

"It is to be lamented that steps are not taken to provide a currency of small pieces of Silver money (easily practicable). The dollar is of too much value for the poor, and little better for convenience than the seven-shilling pieces; while Gold is much cheaper than Silver, being only 3*s.* 1½*d.* per ounce above standard, and Silver is 7*d.* per ounce above standard, or a difference of about 7 per cent. in the proportional value in favor of Gold."

Could the authors of these words have been conscious of the fact that the coinage of Silver had been forbidden by law?

circulation have received an important re-enforcement if Silver had been English Money, or potentially English Money, while it stayed in England? Gold guineas were Money when they arrived in England, and other Gold could upon its arrival be presently coined into guineas, and was always potentially English Money. Now, the actual stock of Silver in transit must have been very large, far larger in fact, in all probability, than the stock of Gold in transit. It seems, therefore, hard to avert the inference, not merely that an increased specie circulation could have been obtained, but that the material was at hand all the time.

For the residue of that stock of metal which was needed to relieve her lack of specie England, with her shipping in every sea, had the world to draw from. Could she not conveniently, in the ordinary course of trade, obtain more Money-Metal, if both Metals would be money when they should arrive in England, than if only one possessed that privilege? In the presence of a lack of specie, due in the first instance not to the pushing out of specie to make room for Paper Money, but to an exceptional hoarding and exceptional need of cash, if England must restrict her home use to one metal, is it not, so far at least as the prospect of relieving that deficiency was concerned, unfortunate that she should have attained the maximum of restriction by excluding the more abundant metal of the two.

Had the right of free coinage of Silver been maintained, England would have been no worse market for Gold (of course if we except the demand for that metal for purposes of currency-gambling) than she was when Silver was excluded from the mint, while the power of becoming English Money, had it not been taken away from Silver in 1798, would have favorably affected the movement of Silver outside of Great Britain as well as at home. This appears to be true *primâ facie;* and if these views be sound, the maintenance of free coinage of Silver in England in that troubled time, notably between the dates of Trafalgar and Waterloo, would have secured foreign allies for the specie circulation of England, as well as have utilized forces at home already more numerous than those actually put into commission, and which for lack of employment lay inefficient and inert.

The existence, therefore, of that strain upon the resources of England, that sudden expenditure of capital, which in 1797, and following years, did deprive her of a goodly part of the Metallic Money she required* has, of itself, no force whatever to meet the question, Would England's paper have subsequently become so depreciated, if Silver as well as Gold had remained freely coinable? Suspended paper is not necessarily depreciated paper. Years passed before the depreciation of the Bank of England note began. And it is the *depreciation* of which I am speaking. The question, in fact, resolves itself into another query: Was England resolved, come what might, to dilute her currency by an overissue of inconvertible paper? Was she determined to overissue paper from

*See on this subject the admirable statement of Mr. Pirmez, page 123.

motives independent of any necessity, political or economic? Was England, in fact, impelled from a mere suicidal instinct to maim herself in the matter of Money, to force herself into an aimless, profitless bankruptcy?

Of course in the presence of a supposed suicidal intent to use Paper Money, the use of any other Money would merely tend to aggravate the situation. It would simply inflate inflation. If convertibility had ceased to be an object, the true policy would have been to prohibit the coinage of Gold as well as that of Silver. But, in fact, the idea of convertibility was not abandoned. Actual convertibility, lost for a time, was still looked for in the immediate future, and in the mean time the paper was to be kept at par. The Standard was not to be lost.

And what was the Standard? A consideration of the statutes here reprinted will show that, for a century, all obligations enforcible by law in England had been payable either in Gold or in Silver Coin, if of full weight, at the option of the payer; and hence, if we use the word "Standard" in the sense which best represents the facts, Gold and Silver remained *de facto* and *de jure* the "Standard" till 1816. Lord Liverpool, however, uses the word "Standard" as simply meaning "the *principal* measure of property;" that is to say, the "*chief* Coin in use. This diction was apparently followed by the Bullion Committee, and Gold was held to be the English "Standard." This confusion of terms would, of course, have been harmless if no confusion of ideas had followed. Indeed, there is a certain moral respectability in the idea that England was bound to stand by her "Standard" in the narrower sense, to maintain that which had been her principal Coin, as still the principal measure of property. Strict honor, ideal justice, would in any case have been better served by the maintenance of the true Double Standard under which, strictly construed, all English obligations for a century had been incurred; and the law of 1798 was in a certain measure (just as the orders of restriction of cash payment of 1797 had been) an impairment of the obligation of contracts. But still, if through some not far-seeing, not clear-thinking, but generous feeling of loyalty, England was attached to the guinea, and on account of habits contracted in the reign of the Georges felt constrained to renounce the "Standard of Elizabeth," it is not necessary to attack this fidelity to Gold in order to decide the question here raised about Silver. As a matter of fact, England did not cleave to Gold. "Her standard floated bravely on the breeze, but it was unattached to *terra firma*. The Union Jack had become a kite. England was using Paper Money." While Lord Liverpool and the authors of the Bullion Report were restricting the meaning of the word "Standard" in such a way as to exclude Silver, the Gold Coin formerly chiefly in use had in ample measure left England, and bank paper had become the "principal measure of property." The question, therefore, whether England was not bound to maintain Gold as her principal measure of property in preference to permitting Silver to emulate Gold in that

function, is practically excluded from the discussion. The only question actually at issue under this head is whether it was not better to have England's paper at par with Silver as well as Gold than to have it below par both in Silver and Gold.

To guard against a misunderstanding, of which an instance has already come to my knowledge (see page 346), I may say here as to this question, looked at from a general point of view (as it was, for example, stated in a reply to an assertion made in the Conference that the Double Standard was responsible for most of England's monetary difficulties) (see page 81) that it is a matter of entire indifference what the Standard had been in the eighteenth century, or actually was at the time the Bullion Report was written. Whatever the policy of England might have been with reference to the metals, in 1810 Silver was specie. It was material for Metallic Money. Silver Coin was the *subject of a par* in all countries of the world, England included; nay, more, it was the preponderating instrument of the world's valuations. Hence this question of the advisability of keeping paper at par with Silver would have been not only a legitimate but a vital question of policy, even if England's exclusion of Silver from coinage had dated from William the Conqueror, instead of dating from the 21st of June, 1798. It is, however, not only convenient, but conducive to a fairer estimate of the policy actually pursued, to regard it as surrounded by whatever vantage-ground for advocacy of it was afforded by contemporary circumstances, and hence arises the importance, in this matter, of the question: What was *de jure* and *de facto* the Standard transmitted to the generations in action by those which had passed away?

Whatever view be taken of the question, whether this which I have stated or some other, and whatever reasons may be found in considerations outside of those purely economic, why this rejection of the aid of Silver in the circulation should have continued, can it be denied that the point was worthy of attention? As I have before suggested, the Bullion Report passes by in silence this entire order of questions.

It was to bring this fact into clear light that I have led the reader to this point. There is a natural disposition on the part of those familiar with the controversy waged in England in the great cause of Specie *vs.* Paper to assume that the knowledge and acumen enlisted in support of specie in that cause had been equally applied to the great ejectment case of Gold *vs.* Silver, which was so summarily decided in favor of the party whose possession seemed paramount.

Such, however, is not the fact. There is indeed no proof that the case was ever fully argued on its merits, either in the Privy Council in 1798, before the Bullion Committee in 1810, or before Parliament in 1816; and since that day it has passed into the limbo of *res adjudicatæ*. Inasmuch, however, as there is no statute of limitations against economic facts, nor against economic truth, and as such judgments are revocable at any time, and as a voice to which the world gives heed* has raised

* Lord Beaconsfield.

the question in England whether she has not "prospered rather in spite of than by reason of the Gold Standard," it is interesting to note that the great men who so sagely guided the policy of their country in establishing in permanence the convertibility of England's Paper Money had really never, in their own minds, clearly formulated the question of convertibility into Silver or convertibility into Silver and Gold as compared with convertibility into Gold alone.

Now, it is not surprising that this omission to pass upon the merits of the question, should have been the symptom or result of an entire lapse of knowledge of the relative position of the two metals, the nature of the demand for them, the causation of their value.

If it were assumed that the two metals were to all intents and purposes one, so that they formed, in fact, one great body of metal, white and yellow, of which each nation drew its quota in whichever color or mixture of colors it preferred, and that, in the main, either metal was a complete substitute for the other, it would be very easy and perfectly natural to pass by unobserved the problems heretofore examined.

The facts to which I have alluded, connected with the novelty of England's situation and of Lord Liverpool's theory, themselves suggest that an unconscious assumption of this kind would have been perfectly natural, but the following observations show that the lapse of knowledge went so far as to involve unconsciousness of the actual status of Silver in English law.

As is apparent from the preceding extracts from the English Statutes, Silver Coin was Legal Tender in 1810 for any sum whatsoever, although for a payment over £25 the payee could demand Coin enough to make up the legal weight of Silver pounds sterling. He would have had to do the same thing in Amsterdam.* This rule was a recurrence to the *compensatio ad pensam* which in older times had been in use, and was in fact the counterpart for Silver of the legislation of 1774, which restored the Gold Coins to their standard weight. No advocate of the Bi-metallic Policy to-day desires to see any other principle than that of honest weight regulate the Legal Tender of Silver Coin. (See pages 76, 130.) In the absence of efficient measures to maintain at standard weight the Silver Coin actually in circulation, the law was a legitimate one. The Legal Tender by tale of under-weight coins is an abomination. A legislator of to-day would not permit the condition of things to continue under which such a law became necessary, but the aim which he would have in view would be identical with that which animated the law making the Silver Coins Legal Tender by weight. The American legislator of 1792 (see page 103) met the difficulty in another way. He provided that Coins below full weight should be Legal Tender only in proportion

* The Dutch *gross gelt*, pieces of 3 guilders, 30 stivers, and 20 stivers, were legally subject, when offered in payment for more than 600 florins, to be bagged and weighed. A certain tolerance in weight was allowed, and if the bag was below this weight it was not Legal Tender. (See Steuart's Works, vol. III, ed. 1805, chap. viii.)—H.

to their weight; but the more effective, although more expensive, mode is that adopted for Gold by the British legislator in providing that Coins worn below a certain limit should be cut up and cease to be Legal Tender. This limitation of Legal Tender by tale had, however, lasted only from 1774 to 1783, and as there had been no improvement, only a deterioration, of the condition of the Coins between 1774 and 1783, it is probable that the limitation was not a matter of much practical importance, because the amount of Silver in circulation was actually less than trade required. This expiration of the statute in 1783, is, by the way, not merely a matter to be ascertained from the statute books but is mentioned by Lord Liverpool on page 129 of his Treatise. Subsequently, and after the restriction of cash payments had taken place, when England was entering upon an experience of a paper standard, worth, in many cases, far less than even worn Silver Coins, this law was revived in connection with the prohibition of Silver Coinage.

What proportion of these facts were known to the authors of the Bullion Report? They say (see page 366) that ever since 1774 Silver Coin had not been Legal Tender above £25.

How was it possible that the facts could have been ignored by such men? The following obvious explanation occurs to me: There were no full-weight Silver Coins in England in 1798, when Silver was coming to the mint, in spite of what the Bullion Report, ignoring that England had Gold, because Gold was cheaper than Silver, calls merely "the usage and commercial habits of the people." In 1798 the manufacture of full-weight Silver Coins had been prohibited. The authors of the Report had, therefore, never seen Silver Coins with which, under the law, one could pay a debt above £25 without losing a percentage on the excess so paid; for, by tale, twenty shillings of George II, worn to $\frac{4}{5}$ of their original weight, were a pound sterling; but when they were paid by weight one must put twenty-five of them into the balance in order with them to equal the weight of that Silver pound sterling which remained the monetary unit of Great Britain. But had they been freshly coined or of full weight, twenty shillings would have made a pound sterling for a payment of £25,000 as well as for £25.

Not having had actual experience of this fact, the authors of the Report ignored it, and spoke of Silver without being aware that Silver was legally, and, but for this prohibition of Coinage which they do not mention, might have been, in practice, as completely Money in England as it was in the Netherlands.

Again, the act of Parliament which ordained in perpetuity that any alien or stranger, native or foreigner, who should bring Silver to the mint should receive pounds sterling without charge and without delay, had never been formally repealed. It was nominally in force in 1810. It was an act of some importance at a time when every one was of opinion that Gold had risen greatly in value, for if Gold had risen greatly in value, it must, under the English law, transfer its function of

"Standard" to the metal that stood steady. And yet the Bullion Report does not mention it.

But, although not formally repealed, this law of Free and Gratuitous Coinage of Silver was in fact abrogated by the law of 1798-'99, which forbade in perpetuity the coinage of Silver in England. And yet the Bullion Report shows no knowledge of this fact. We hear much of the mint price of Standard Silver, as we do of the mint price of Standard Gold, and Mr. Horner, in one of his questions, says: "You know that at the time we are coining Gold at £3 17*s.* 10½*d.* per ounce we are coining Silver at 5*s.* 6*d.* per ounce!" (Compare section III, page 368.)

How to account for this triple lapse of knowledge?

Is it merely one of those anomalies which, at least in other departments of thought, English thinkers, manly in their self-examination, are not unwont to discover in the theories and practice of their countrymen?—H.

REPORT FROM THE SELECT COMMITTEE ON THE HIGH PRICE OF GOLD BULLION.

[Extracts.]

Ordered, by the House of Commons, to be printed, 8 *June,* 1810.

THE SELECT COMMITTEE appointed to enquire into the cause of the High Price of Gold Bullion, and to take into consideration the state of the Circulating Medium, and of the Exchanges between Great Britain and Foreign Parts;—and to report the same, with their Observations thereupon, from time to time, to the House;—Have, pursuant to the Orders of the House, examined the matters to them referred; and have agreed to the following REPORT:

Your Committee proceeded, in the first instance, to ascertain what the price of gold bullion had been, as well as the rates of the foreign exchanges, for some time past; particularly during the last year.

Your Committee have found that the price of gold bullion, which, by the regulations of His Majesty's Mint, is 3*l.* 17*s.* 10½*d.* per ounce of standard fineness, was, during the years 1806, 1807, and 1808, as high as 4*l.* in the market. Towards the end of 1808 it began to advance very rapidly, and continued very high during the whole year 1809; the market price of standard gold in bars fluctuating from 4*l.* 9*s.* to 4*l.* 12*s.* per oz. The market price at 4*l.* 10*s.* is about 15½ per cent. above the Mint price.

Your Committee have found, that during the three first months of the present year, the price of standard gold in bars remained nearly at the same price as during last year; viz., from 4*l.* 10*s.* to 4*l.* 12*s.* per oz. In the course of the months of March and April, the price of standard gold is quoted but once in Wettenhall's tables; viz., on the 6th of April last, at 4*l.* 6*s.* which is rather more than 10 per cent. above the Mint price. The last quotations of the price of gold, which have been given

in those tables, are upon the 18th and 22d of May, when Portugal gold in coin is quoted at 4*l.* 11*s.* per oz.: Portugal gold coin is about the same fineness as our standard. It is stated in the same tables that in the month of March last the price of new doubloons rose from 4*l.* 7*s.* to 4*l.* 9*s.* per oz. Spanish gold is from 4½ to 4¾ grains better than standard, making about 4*s.* per oz. difference in value.

It appears by the evidence, that the price of foreign gold coin is generally higher than that of bar gold, on account of the former finding a more ready vent in foreign markets. The difference between Spanish and Portugal gold in coin and gold in bars, has of late been about 2*s.* per ounce. Your Committee have also to state, that there is said to be at present a difference of between 3*s.* and 4*s.* per ounce between the price of bar gold which may be sworn off for exportation as being foreign gold, and the price of such bar gold as the dealer will not venture to swear off: while the former was about 4*l.* 10*s.* in the market, the latter is said to have been about 4*l.* 6*s.* On account of these extrinsic differences, occasioned either by the expense of coinage, or by the obstructions of law, the price of standard gold in bars, such as may be exported, is that which it is most material to keep generally in view through the present inquiry.

It appeared to your Committee, that it might be of use, in judging of the cause of this high price of gold bullion, to be informed also of the prices of silver during the same period. The price of standard silver in his Majesty's Mint is 5*s.* 2*d.* per ounce; at this standard price, the value of a Spanish dollar is 4*s.* 4*d.* or, which comes to the same thing, Spanish dollars are, at that standard price, worth 4*s.* 11½*d.* per ounce. It is stated in Wettenhall's tables that throughout the year 1809, the price of new dollars fluctuated from 5*s.* 5*d.* to 5*s.* 7*d.* per ounce, or from 10 to 13 per cent. above the Mint price of standard silver. In the course of the last month, new dollars have been quoted as high as 5*s.* 8*d.* per ounce, or more than 15 per cent. above the Mint price.

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[Page 4.]

It will be found by the evidence, that the high price of gold is ascribed, by most of the witnesses, entirely to an alleged scarcity of that article, arising out of an unusual demand for it upon the continent of Europe. This unusual demand for gold upon the continent is described by some of them as being chiefly for the use of the French armies, though increased also by that state of alarm; and failure of confidence, which leads to the practice of hoarding.

Your Committee are of opinion, that, in the sound and natural state of the British currency, the foundation of which is gold, no increased demand for gold from other parts of the world, however great, or from whatever causes arising, can have the effect of producing here, for a considerable period of time, a material rise in the market price of gold. But before they proceed to explain the grounds of that general opinion,

they wish to state some other reasons which alone would have led them to doubt whether in point of fact, such a demand for gold, as is alleged, has operated in the manner supposed.

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[Page 6.]

Here your Committee must observe, that both at Hamburgh and Amsterdam, where the measure of value is not gold as in this country, but silver, an unusual demand for gold would affect its money price, that is, its price in silver; and that as it does not appear that there has been any considerable rise in the price of gold, as valued in silver, at those places in the last year, the inference is, that there was not any considerable increase in the demand for gold. That permanent rise in the market price of gold above its Mint price, which appears by Mr. Greffulhe's paper to have taken place for several years both at Hamburgh and Amsterdam, may in some degree be ascribed, as your Committee conceive, to an alteration which has taken place in the relative value of the two precious metals all over the world; concerning which, much curious and satisfactory evidence will be found in the Appendix, particularly in the documents laid before your Committee by Mr. Allen. From the same cause, a fall in the relative price of silver appears to have taken place in this country for some time before the increase of our paper currency began to operate. Silver having fallen in relative value to gold throughout the world, gold has appeared to rise in price in those markets where silver is the fixed measure, and silver has appeared to fall in those where gold is the fixed measure.

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[Page 10.]

In this country, gold is itself the measure of all exchangeable value, the scale to which all money prices are referred. It is so, not only by the usage and commercial habits of the country,* but likewise by operation of law, ever since the act of the 14th of his present Majesty [finally rendered perpetual by an act of the 39th year of the reign] disallowed a legal tender in silver coin beyond the sum of 25*l*.

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[Page 11.]

Your Committee think it proper to state still more specifically, what appear to them to be the principles which govern the relative prices of gold in bullion and gold in coin, as well as of paper circulating in its place and exchangeable for it. They cannot introduce this subject more properly, than by adverting, to those simple principles and regulations, on which a coinage issuing from the King's mint is founded.

The object is, to secure to the people a standard of a determinate value, by affixing a stamp, under the royal authority, to pieces of gold, which are thus certified to be of a given weight and fineness. Gold in bullion is the standard to which the legislature has intended that the

*See page 323.

coin should be conformed, and with which it should be identified as much as possible. And if that intention of the legislature were completely fulfilled, the coined gold would bear precisely the same price in exchange for all other commodities, as it would have borne had it continued in the shape of bullion; but it is subject to some small fluctuations.

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[Page 15.]

In this manner at Hamburgh, silver is not only the measure of all exchangeable value, but it is rendered an invariable measure, except in so far as the relative value of silver itself varies with the varying supply of that precious metal from the mines. In the same manner the usage, and at last the law, which made gold coin the usual and at last the only legal tender in large payments here, rendered that metal our measure of value: and from the period of the reformation of the gold coin down to the suspension of the Bank payments in specie in 1797, gold coin was not a very variable measure of value; being subject only to that variation in the relative value of gold bullion which depends upon its supply from the mines, together with that limited variation, which, as above described, might take place between the market and the Mint price of gold coin.

The highest amount of the depression of the coin which can take place when the Bank pays in gold, has just been stated to be about 5½ per cent., and accordingly it will be found, that in all the periods preceding 1797, the difference between what is called the Mint price and market price of gold never exceeded that limit.

Since the suspension of cash payments in 1797, however, it is certain, that, even if gold is still our measure of value and standard of prices, it has been exposed to a new cause of variation, from the possible excess of that paper which is not convertible into gold at will; and the limit of this new variation is as indefinite as the excess to which that paper may be issued. It may indeed be doubted, whether since the new system of Bank of England payments has been fully established, gold has in truth continued to be our measure of value: and whether we have any other standard prices than that circulating medium issued primarily by the Bank of England and in a secondary manner by the country banks, the variations of which in relative value may be as indefinite as the possible excess of that circulating medium. But whether our present measure of value, and standard of prices, be this paper currency thus variable in its relative value, or continues still to be gold, but gold rendered more variable than it was before in consequence of being interchangeable for a paper currency, which is not at will convertible into gold, it is, in either case, most desirable for the public that our circulating medium should again be conformed, as speedily as circumstances will permit, to its real and legal standard, gold bullion.

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[From page 60.]

Average amount of Bank of England Notes in circulation, in each of the following years:

	Notes of £5 and upwards, including bank post bills.	Notes under £5.	Total.
1798	£11, 527, 250	£1, 807, 502	£13, 334, 752
1799	12, 408, 522	1, 653, 805	14, 062, 327
1800	13, 598, 666	2, 243, 266	15, 841, 932
1801	13, 454, 367	2, 715, 182	16, 169, 594
1802	13, 917, 977	3, 136, 477	17, 054, 454
1803	12, 983, 477	3, 864, 045	16, 847, 522
1804	12, 621, 348	4, 723, 672	17, 345, 020
1805	12, 697, 352	4, 544, 580	17, 241, 932
1806	12, 844, 170	4, 291, 230	17, 135, 400
1807	13, 221, 988	4, 183, 013	17, 405, 001
1808	13, 402, 160	4, 132, 420	17, 534, 580
1809	14, 133, 615	4, 863, 275	19, 001, 890

[For the first five months of 1810, Appendices XXXIX and XL give an average of about 15,000,000 of the first denomination above mentioned and about £5,800,000 of notes under £5.]

EXTRACT FROM THE MINUTES OF EVIDENCE.

Sabbati, 24° die Februarii, 1810.

FRANCIS HORNER, Esq., in the chair.

W. MERLE, called:

* * * * * * *

[Page 40.]

Q. What is the cause of the present price of Silver bullion being higher than the coinage price?—A. The demand. * * *

Q. You know that at the time we are coining Gold at £3 17*s.* 10½*d.* per ounce, we are coining Silver at 5*s.* 2*d.* per ounce, that the proportions between Gold and Silver are such that the Silver will always buy more than the Gold?—A. Yes; certainly it will.

Q. Therefore, it is not possible that much Silver should remain as the Coin of the country?—A. No; certainly not.

Q. Are not the bankers in the habit of giving a premium for Silver?—A. We used to do it till we got the stamped dollars.

* * * * * * *

C.

MEMORANDA FROM, AND CALCULATIONS BASED UPON, CERTAIN "ACCOUNTS" IN THE APPENDIX OF THE BULLION REPORT.

From Appendix No. 1.

Account of Gold and Silver bullion and wrought plate exported from Great Britain to foreign countries.

	1801.	1802.	1803.	1804.	1805.	1806.	1807.	1808.	1809.	1810.
	oz. dwt.	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*	*oz. dwt.*
Gold coin and bullion	28, 112 10	103, 377 06½	23, 673 15¾	3, 053 11	.....	17, 007	3, 019	13, 008	14, 716 13¾	69, 962 7¼
Wrought Gold plate	21 8	58 4	11 10	19 11	21 12	24 7¾	48	17 14	8	84 18
Totals	28, 133 18	103, 435 10½	23, 684 5¼	3, 073 2	21 12	17, 031 7¼	3, 067	13, 025 14	14, 724 13¾	70, 047 5¼

Total Gold 1801–1810 ..... [*oz.*] [*dwt.*] 276, 244 9

Silver coin and bullion	2, 070, 425 & 134 bars	2, 123, 884	3, 793, 156	6, 434, 039	4, 600, 296 11	7, 951, 261 9	3, 063, 094 13	506, 273 5	3, 570, 783 3	3, 190, 742 7
Wrought Silver plate	91, 879 14	96, 076 9	86, 180 9	73, 510 5	97, 389 6	98, 730 6	84, 991 15	81, 796 16	76, 220 4	86, 285 17
Totals	2, 162, 304 14 & 134 bars	2, 219, 960 9	3, 879, 336 9	6, 507, 549 5	4, 697, 685 17	8, 049, 991 15	3, 147, 086 8	588, 070 1	3, 647, 003 7	3, 277, 028 4

Total Silver 1801–1810 ..... *oz. dwt.* 38, 176, 026 9 + 134 bars.

Assuming the Gold to have been of English standard, this gives about £1,074,127 for the total export of Gold, and if we count a dollar as 432 grains we find $42,417,806 + 134 bars as the total export of Silver, and the relative importance of the two as 89 per cent. of Silver to 11 per cent. of Gold.

From No. XIX.

An account of all Gold imported into His Majesty's mint and the amount of Gold moneys coined, from the year 1797, inclusive, &c.

	£	s.	d.
Total amount coined, 1797–1809	8,960,113	11	6
Ingots made from guineas	2,296,056	0	5
Ingots made from foreign Gold	7,044,282	11	6
Coined in 1797 and 1798	4,967,801	5	0
Coined from foreign Gold, 1799–1809	3,993,812	6	0

From No. XXV.

General estimate of the annual coinage of Spanish-American dollars: Total, 38,200,000; other estimates are 35,000,000 and 40,000,000.

From No. XXVII.*

The total proportion of Silver to Gold about the middle of the last century was therefore 2,000,000 [marks]: 67,095, or as 100,000 : 3354, or about 30 to 1.

If the preceding calculations are well founded, the produce of Gold from America has diminished during the last half century in the proportion of 67,095 to 56,658, or in the proportion of nearly 6 to 5; while that of Silver has increased during the same period in the proportion of 2,000,000 to 3,517,647, or very nearly as 2 to 3½.

From No. XXXIII.

Estimate of the quantities of Gold and Silver added to the commerce of Europe from 1790 to 1802, from a work entitled "Traité Elémentaire de Mineralogie, par Alexandre Brongniart, Paris, 1807": Total kilogrammes, 18,100 Gold; 947,000 Silver. The total annual produce of Silver is to the total annual produce of Gold as 52 to 1.

*From No. XIV.

Accounts of the amount in ounces of sales of Silver pieces of eight [Spanish dollars] made by the governor and company of the Bank of England from the 1st of January, 1797, to the 1st of March, 1810, inclusive. Silver pieces of eight, 58,916,937; Silver ingots, 12,954,291.

From No. XLI.

An account of all the dollars issued by the Bank of England to the 8th day of February, 1810, inclusive:

Dollars stamped in the year 1797 and issued	$2,325,099
Dollars stamped in the year 1804 and issued	1,419,484
Dollars stamped in the year 1809 and 1810 and issued	1,073,051
Total	4,817,634

From No. LI.

An account of the value of Silver tokens issued by the Bank of Ireland to the 3d March, 1810:

Value of 6*s.* tokens issued	£232,052
Value of 2*s.* 6*d.*	395,263
Value of 10*s.* 5*d.*	520,041
Total value	1,147,356

From No. XLIX.

Restriction bill, 27 February, 1797.

	Total of bank notes.
27 February, 1797	8½ millions.
Rose gradually in 1797 and 1798 to	13
March, 1799	13½
After this period great commercial distress, large importations of coin, heavy subsidies, and the Hambro Exchange continued falling, &c.	
Between the end of the year 1799 to the end of 1802 an increased quantity of £1 and £2 notes were issued, swelling the sum total of *all* notes to	13½ to 16½
From January, 1803, to the end of 1807	16½ to 18
From January, 1808, to Christmas, 1809	17½ to 18

From No. LXXIV.

An account of all moneys which have been sent from this country by the paymasters-general of His Majesty's land forces for the use of His Majesty's armies abroad, or for the succor of His Majesty's foreign allies, from the commencement of the present war to 1st February, 1810, distinguishing Gold from Silver, bullion from coin, and the places to which said moneys were sent respectively.

Specie and Bullion purchased by the paymasters-general and sent abroad May 5, 1805, to February 1, 1810.

STERLING COST.

	£	*s.*	*d.*
Silver, almost entirely in dollars	5,305,805	17	5
Gold	520,301	0	7
Total	5,826,106	18	0

Specie received by the paymasters-general other than by purchase and sent abroad.

Description of specie sent.	Number of ounces.	Number of coin.
Silver in dollars		6,297,846
Gold in doubloons		15,812⅓
Gold equal to dollars [sic.]		105,949
Silver in dollars	3,162,153.10	

NOTE.—I presume the figures under the head of number of coin not to indicate pounds sterling but dollars.

If we assume that no more than a pound sterling was paid for $4\frac{4}{10}$ Spanish dollars, and that the Silver in dollars was 3 per cent. less in fineness than English standard, we obtain the following approximate figures:

Specie for pay and subsidies exported from Great Britain from May 5, 1805, *to February* 1, 1810.

Silver dollars (first table)	23,345,542
Silver dollars (second table)	6,297,846
Silver dollars (second table)	3,494,311
Total	33,137,699

Gold equal to 520,301*l.* 0*s.* 7*d.*
Gold in doubloons, 15,812½ (dollars?).
Gold equal to dollars, 105,949.

If these numbers opposite Gold in doubloons mean doubloons and not dollars, and if we put the doubloon at $16, we obtain as the total expenditure in Gold $2,648,267.

We find, therefore, that the expenditures of the paymasters-general, 1805 to 1810, were about 92 per cent. in Spanish Silver dollars and 8 per cent. in Gold.

THE STATUTE OF 1816 WHICH COMPLETED THE ESTABLISHMENT OF THE GOLD STANDARD.

(56 Geo. III, c. 68.)

AN ACT to provide for a New Silver Coinage, and to regulate the Currency of the Gold and Silver Coin of this Realm.—(June 22, 1816.)

Whereas, the Silver Coins of the Realm have, by long Use and other Circumstances, become greatly diminished in Number and deteriorated in Value, so as not to be sufficient for the Payments required in Dealings under the Value of the Current Gold Coins, by Reason whereof a great Quantity of Light and Counterfeit Silver Coin and Foreign Coin has been introduced into Circulation within this Realm; and the Evils resulting therefrom can only be remedied by a new Coinage of Silver Money, to be made and issued under proper Regulations for maintaining its Value and preserving the same in Circulation: Be it therefore enacted by the King's Most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same, That from and after the passing of this Act, so much of an Act made in the Eighteenth Year of the Reign of His late Majesty King Charles the Second, intituled An Act for encouraging of Coinage, and also so much of all and every other Act and Acts as provide and enact that whatsoever Person or Persons, Native or Foreigner, Alien or Stranger, should bring any Foreign Coin, Plate or Bullion of Silver, in mass, molten or alloyed, or any Sort or Manufacture of Silver, into His Majesty's Mint or Mints within the Kingdom of England, to be there melted down and coined into the Current Coins of this Kingdom, should have the same there assayed, melted down and coined with all convenient Speed, without any Defalcation, Diminution, or Charge for the Assaying, Coinage, or Waste in Coinage, so as that for every Pound Troy of Sterling or Standard Silver that should be brought in and delivered by him or them to be assayed, melted down, and coined as aforesaid, there should be delivered out to him or them respectively a Pound Troy of the Current Coins of this Kingdom, of Sterling or Standard Silver, and so proportionably for a greater or lesser Weight, or more or less, in Proportion to the Excess or Deficiency in Fineness of any such Bullion, shall be and the same is and are hereby repealed.

II. And be it further enacted, That so much of an Act made in the Seventh and Eighth Years of the Reign of His late Majesty King William the Third,* intituled An Act for

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*THE EARLY LAW OF LEGAL TENDER.

Until a period comparatively recent it has been reckoned *inter jura majestatis* to determine the currency and value of coins, and hence the earlier law of legal tender

remedying the ill State of the Coin of the Kingdom; and also so much of all and every other Act and Acts as declare, enact or provide, that the Weight and Fineness prescribed by any Indenture theretofore made with his Majesty's Master and Worker for making of Silver Monies at the Tower of London, shall be and remain to be the Standard of and for the lawful Silver Coin of the Kingdom; and also so much of an Act made in the Fourteenth Year of His present Majesty's Reign, intituled An Act to prohibit the Importation of Light Silver Coin of this Realm from foreign Countries into Great Britain or Ireland, and to restrain the Tender thereof beyond a certain Sum, as enacts that any Silver Coin of the Realm, less in weight than after the rate of Sixty-two Shillings for every Pound Troy, shall be forfeited; and of any Act or Acts for reviving or continuing or making perpetual the Provisions of the said last recited Act in this respect, shall, from and after the passing of this Act, be and the same is and are hereby repealed.

III. And Whereas by an act made in the Thirty eight Year of his present Majesty's Reign, intituled An Act to revive and continue, until the first Day of January One Thousand Seven hundred and ninety-nine, an Act passed in the Fourteenth Year of the Reign of His present Majesty, Chapter forty-two; videlicet, on the Thirtenth Day of January, One thousand seven hundred and seventy four, intituled 'An Act to prohibit the Importation of Light Silver Coin of this Realm from foreign Countries into Great Britain or Ireland, and to restrain the Tender thereof beyond a certain Sum, and to suspend the coining of Silver after reciting that His Majesty had appointed a committee of His Privy Council to take into Consideration the State of the Coin of this Kingdom, and the present Establishment and Constitution of His Majesty's Mint, and that Inconvenience might arise from any Coinage of Silver until such Regulations might be framed as should appear necessary, and that from the then low Price of Silver Bullion, owing to temporary Circumstances, a small Quantity of Silver Bullion had been brought to the Mint to be coined, and that there was reason to suppose that a still further Quantity might be brought, and that it was therefore necessary to suspend the Coinage of Silver for the present, it was enacted that from and after the passing of the said act no

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is to be sought, not in the statute books, but in Royal Proclamations, Mint "Indentures," and Regulations.

The reader has perhaps observed that the above repealed statute of 18 Car. II, C. 5 reprinted on page 309), accepts the currency of "gold and silver coins of this Kingdom" as a fact.

So, likewise, the abovementioned statute of William III; which is, by the way, one of the principal laws which directed the famous recoinage of the silver coins with which the readers of Macaulay's History of England are familiar.

This statute directs in section II that the officers of the Mint receive by indenture the ingots of melted silver coin,

"To be there immediately refined or otherwise reduced to sterling, and to be coined by the mill and press into the current money of this realm, to hold such weight and fineness as are prescribed by the present indenture with His Majesty's master and worker for making of silver monies at the tower of London; and with such allowance, called the remedy, as is given to the said master by the said indenture, which weight and fineness are hereby declared to be, and shall remain to be the standard of and for the lawful Silver Coin of this Kingdom."

The "standard of and for the Lawful Silver Coin of this Kingdom" is of course that fixed by the Regulation of the Mint in the 43 of Elizabeth (1601), namely, as stated by Newton, 62 shillings to the pound weight of silver, 11 ounces 2 pennyweights fine and 18 pennyweights alloy.

The standard for the Gold Coin, according to a regulation of the time of King Charles II. was 44½ guineas to the pound weight of gold, 11 ounces fine and 1 ounce alloy. The number of silver shillings the guinea was worth was fixed by proclamation. (See page 316.) In a certain sense, therefore, silver remained the Monetary Unit until 1816.

Silver Bullion should be coined at the Mint, nor should any Silver Coin that might have been coined there be delivered, any Law to the contrary in anywise notwithstanding:

And whereas Regulations with respect to a Coinage of Silver cannot be carried into Effect by reason of the said Enactment in the said last recited Act:

Be it therefore enacted, That from and after the passing of this Act, so much of the said last recited Act as enacts that no Silver Bullion shall be coined at the Mint, and that no Silver Coin that may have been coined there shall be delivered, shall be and the same is hereby repealed.

IV. And be it further enacted, That from and after the passing of this Act, it shall and may be lawful for His Majesty's Master and Worker of the Mint, at His Majesty's Mint in London, to coin or cause to be coined any Silver Bullion, which, at any time before or after the passing of this Act, shall have been or shall be brought to or delivered or deposited at the said Mint, into Silver Coins of a Standard and Fineness of Eleven Ounces Two Pennyweights of fine Silver, and Eighteen Pennyweights of Alloy in the Pound Troy, and in weight after the Rate of Sixty-six Shillings to every Pound Troy, whether the same be coined in Crowns, Half-crowns, Shillings or Sixpences, or Pieces of a lower Denomination; anything in any Act or Acts of Parliament in force in Great Britain or Ireland respectively, immediately before the passing of this Act, or anything in any Indenture with His Majesty's Master or Worker of the said Mint for the time being, or any Law, Usage or Custom whatsoever to the contrary thereof in anywise notwithstanding.

V. And be it further enacted, That from and after such Days and during such Period of time as shall be named and appointed in and by any Proclamation or Proclamations which shall be made and issued for that Purpose, by or on behalf of His Majesty, by and with the Advice of His Majesty's Privy Council, it shall and may be lawful for any Person or Persons to bring and deliver into the said Mint any Silver Coin of this Realm heretofore coined and current, which shall by any Officer or Officers of the mint to be appointed for that purpose by the Master of the said Mint, be judged and deemed to be such Silver Coin of the Realm; and that there shall be delivered out from the said Mint, to every Person bringing in and delivering such Old Silver Coin a Sum in New Silver Coins, of Crowns, Half Crowns Shillings and Sixpences, to be coined pursuant to the Directions of this Act, equal to the Amount of the Silver Coins so brought in and delivered as aforesaid, according to the respective Denominations of such Silver Coins; so that every such Person shall have and receive a Sum of Money equal in its Denomination in the New Silver Coinage, to the Sum for which the Old Silver Coin brought in shall have passed, according to the Denomination thereof; and all such Old Silver Coin so to be brought and delivered into and received at the said Mint, shall from time to time be melted down and coined into New Silver Coins of this Realm, according to the Directions of this Act respecting Money to be coined from any Silver Bullion brought into or deposited at the said Mint in manner aforesaid.

VI. Provided always, and be it enacted, That during the Period mentioned in any such Proclamation or Proclamations, it shall and may be lawful for the Lord High Treasurer, or for the Commissioners of His Majesty's Treasury for the time being, to appoint any number of persons at any place or places throughout the United Kingdom, for the purpose of receiving all such Old Current Silver Coin of the Kingdom, as shall appear to any Person or Persons who shall be appointed by the Master of the Mint for the purpose of inspecting the same, to be such Old Current Silver Coin, and for exchanging the same for New Silver Coin, according to their respective Denominations in manner aforesaid; and that such Persons shall give such Security, and shall render such Account, and shall be subject to, and shall obey all such Rules, Regulations, Restrictions and Directions, as the Lord High Treasurer or Commissioners of the Treasury shall in that behalf order and direct; and that all such Old Current Silver Coin, so to be received by any such Person so to be appointed, shall be transmitted in such manner, and at such times as the said Lord High Treasurer or Commissioners of the Treasury shall direct, to His Majesty's Mint in London, there to be melted down and coined in manner aforesaid.

VII. And be it further enacted, That from and after the Expiration of the Period to be mentioned in any such Proclamation or Proclamations as aforesaid, it shall and may be lawful for any Person or Persons whomsoever, and all Persons are hereby authorized and required, to cut, break or deface, or cause to be cut, broken or defaced any Piece or Pieces of Old Silver Coin of this Realm current at any time before the passing of this Act, which shall be tendered to them or any of them in Payment, and which shall be of less Value than the Denomination thereof shall import, and the Per-

son tendering the same shall bear the Loss; but if any such Piece so cut, broken or defaced, shall appear to be of the full Value which its Denomination shall import, the Person who shall cut, break or deface the same, shall and he is hereby required to take and receive the same at the Rate it was coined for; and if any Question or Dispute shall arise whether the Piece so cut be of less Value than its Denomination shall import, such Question or Dispute shall be heard and finally determined by the Mayor, Bailiff or Bailiffs, or other Chief Officer of any City or Town Corporate where such Tender shall be made; and if such Tender shall be made out of any City or Town Corporate, then by some Justice of the Peace of the County inhabiting or being near the Place where such Tender shall be made; and the said Mayor or other Chief Officer and Justice of the Peace respectively, shall have full Power and Authority to summon any Person or Persons to appear and give Evidence before him or them, and to administer an Oath, as he shall see convenient to any Person, for determining any Questions relating to the value and lawful Currency of any such Piece of Coin.

VIII. And Whereas it is expedient that Provision should be made for the loss arising from the Deficiency and Recoinage of the Silver Coin of the Realm; Be it therefore enacted, That it shall and may be lawful for the Lord High Treasurer or the Commissioners of his Majesty's Treasury for the time being, or any Three or more of them, and he and they is and are hereby authorized and required to issue and apply or cause to be issued and applied from time to time as they shall see Occasion, such sum and Sums of Money, not exceeding the Sum of Five hundred thousand Pounds, out of any of the Aids or Supplies granted for the year One thousand eight hundred and sixteen, as shall appear to be the amount of any such Deficiency or Deficiencies, according to such accounts to be from time to time delivered to the said Lord High Treasurer or Commissioners, of the Treasury, by the Master and Worker of His Majesty's Mint, as the said Lord High Treasurer or Commissioners of the Treasury shall for that Purpose direct and require; and likewise any such Sum and Sums of Money as shall appear to them to be requisite to defray all Charges and Expences in melting down such deficient Money, and casting the same into Ingots and assaying the same; and also to advance such Sum and Sums of Money as they shall see occasion from time to time, to the Master and Worker of His Majesty's Mint for and toward the several Expences to be incurred in and about the Coinage of Silver Coin under this Act; and also to grant a reasonable Reward to such Persons as shall be appointed as aforesaid throughout the Kingdom, for receiving Old Silver Coin and exchanging the same for New Silver Coin, and to all other Officers, Clerks, and Persons employed in and about the several matters relating to this act; and to discharge all such other incidental Expences as shall occasionally attend the Execution of this Act.

IX. And be it further enacted, That from and after such Day as shall be named and appointed in and by any Proclamation which shall be made and issued for that purpose, by or on behalf of His Majesty, by and with the Advice of His Majesty's Privy Council, it shall and may be lawful for any Person or Persons, Native or Foreigner, to bring any Foreign Coin, or any other Coin, or reputed Coin, Plate or Bullion of Silver, in Mass, molten or alloyed, or any Sort of Manufacture of Silver, and to deliver the same at His Majesty's Mint in London, to be there melted down and coined in Current Silver Coins of this Kingdom; and such Silver Coin, Plate, Bullion or Manufacture so brought or delivered, Shall be assayed at the said Mint, and melted down and coined with all convenient speed, into Silver Coins of a Standard in Fineness of Eleven Ounces, Two Pennyweights of fine Silver and Eighteen Pennyweights of Alloy in the Pound Troy, and in Weight after the Rate of Sixty six Shillings to every Pound Troy, whether the same be coined in Crowns, Half Crowns, Shillings or Sixpences, or Pieces of a lower Denomination; and that as soon as conveniently may be after any such Silver Coin, Plate, Bullion, or Manufacture respectively, so brought to the Mint, shall be melted and assayed, there shall be delivered to the Person bringing in and delivering the same a sum in Silver Coins, of Crowns, Half Crowns, shillings or Sixpences, after the Rate of Sixty two Shillings of the Standard Fineness and Weight hereinbefore mentioned for every Pound Troy of Standard Silver of the Fineness aforesaid, by such Person brought and delivered into the Mint, and so proportionably for a greater or lesser Weight; and that for the Defalcation or Diminution and for the Charge for the Assaying, Coinage and Waste in Coinage of all such Silver so to be brought to the Mint as aforesaid, there shall and may be retained at the said Mint the sum of Four Shillings of the Standard and Weight aforesaid, for every Pound Troy of such Standard Silver so brought in and delivered, and so proportionably for any greater or lesser Weight, making in the whole after the Rate of Sixty Six Shillings for every Pound Troy of such Standard Silver; anything in any Act or Acts in force in Great Britain or Ireland, immediately before the passing of this Act, to the contrary in anywise notwithstanding.

X. And be it further enacted, That an Account shall be kept at the mint of the Amount of all sums of Money arising from the Allowance of Four Shillings for every Pound Troy of Silver to be retained at the said Mint, in manner aforesaid; and that all such Sums so retained shall in the first Place be applied in or towards the Payment of the Expences of the coining of such Silver; and the Surplus thereof (if any) after

the Payment of such Expences shall be carried to and made Part of the Consolidated Fund.

XI. And Whereas at various times heretofore the Coins of this Realm of Gold and Silver have been equally a legal Tender for Payments to any Amount, and great Inconvenience has arisen from both those precious Metals being concurrently the Standard Measure of Value, and equivalent for property; and it is expedient that the Gold Coin made according to the Indentures of the Mint should henceforth be the sole Standard Measure of Value and legal Tender for Payment, without any Limitation of Amount, and that the Silver Coin should be a legal Tender to a limited Amount only, for the Facility of Exchange and Commerce:

Be it therefore enacted, That from and after the passing of this Act, the Gold Coin of this Realm shall be and shall be considered and is hereby declared to be the only legal Tender for Payments, (except as hereinafter provided) within the United Kingdom of Great Britain and Ireland; and that the said Gold Coin shall hold such Weight and Fineness as are prescribed by the present Indenture with his Majesty's Master and Worker of the Mint for making Gold Monies at his Majesty's Mint in London, and with such allowance, called the Remedy, as is given to the said Master by the said Indenture; which Weight and Fineness are hereby declared to be and shall remain to be the Standard of and for the lawful Gold Coin of the Realm, so far as relates to Gold Coin of the Denominations at present in use, and specified in the said indenture; and in case any Gold Coin or Coins of any other Denomination shall hereafter be coined at the said Mint under any future Indenture, such Gold Coin and Coins shall hold the like Standard in Fineness as the Gold Coins of the present Denominations, and shall hold such Weight as shall be proportionate to the Weight of the present Gold Coins, according to the Value for which such Gold Coin or Coins of any new Denomination shall be declared to be current.

XII. And Whereas it is expedient that the Silver Coin of the Realm should be a legal Tender by Tale, according to its Denomination, to any Amount not exceeding the Sum of Forty Shilling; Be it therefore enacted, That from and after such Day as shall be for that purpose named in any Proclamation, which at any time after the passing of this Act shall be made and issued, by or on behalf of His Majesty, with the Advice of His Majesty's Privy Council, so much and such Parts of the Act made in the Fourteenth Year of His present Majesty's Reign intituled An Act to prohibit the Importation of Light Silver Coin of this Realm from Foreign Countries into Great Britain or Ireland, and to restrain the Tender thereof beyond a certain Sum, as enacts or provides or may be construed to enact or provide, that any Tender in Silver Coin of the Realm shall be legal to the Amount of Twenty-five Pounds or a Tender for any greater Sum, according to its Value by Weight, and also so much of any Act and Acts whereby the said last recited Act is continued, revived or made perpetual, shall be, and the same is and are hereby repealed accordingly: And that from and after such Day as shall be for that purpose named in any such Proclamation to be made and issued as aforesaid, no Tender of Payment of Money made in the Silver Coin of this Realm of any Sum exceeding the sum of Forty Shillings at any one time, shall be reputed a Tender in Law, or allowed to be a legal Tender within the United Kingdom of Great Britain and Ireland, either by Tale or weight of such Silver Coin or otherwise howsoever; anything in the said recited Act of the Fourteenth Year of his present Majesty's Reign, or in any other Act or Acts in force immediately before the passing of this Act or any Usage or Custom to the contrary in anywise, notwithstanding.

XIII. And be it further enacted, That from and after the passing of this Act, no Person shall by any Means, Device, Shift or Contrivance whatsoever, receive or pay for any Gold Coin lawfully current within the United Kingdom of Great Britain and Ireland, any more or less in Value, Benefit, Profit or Advantage, than the true lawful Value which such Gold Coin doth or shall by its Denomination import; nor shall utter or receive any Piece or Pieces of Gold Coin of this Realm, at any greater or higher Rate or Value, nor at any less or lower Rate or Value than the same shall be current for in Payment, according to the Rates and Values declared and set upon them pursuant to Law; and that every Person who shall offend herein shall be deemed and adjudged guilty of a Misdemeanor, and being thereof convicted by due course of Law, shall suffer Imprisonment for the Term of Six Calendar Months, and shall find Sureties for his or her good Behavior for One Year more, to be computed from the End of the said Six Months; and if the same Person shall afterwards be convicted of the like offence, such Person shall for such Second Offence suffer One Year's Imprisonment, and find Sureties for his or her good Behavior for One Year more, to be computed from the End of the said last mentioned year; and if the same Person shall afterwards offend against this Act, and shall by due course of Law be convicted of any subsequent Offence, he or she shall be imprisoned for the Term of Two Years for every such subsequent Offence.

XIV. And be it further enacted, That if any Person who shall be convicted of receiving or paying any such Gold Coin contrary to this Act, shall afterwards be guilty of the like Offence, the Clerk of the Assize or Clerk of the Peace for the County, City

or Place where such conviction was so had, shall, at the Request of the Prosecutor or any other Person on His Majesty's behalf, Certify such Conviction, for which Certificate Two Shillings and Six Pence, and no more, shall be paid; and such Certificate being produced in Court, shall be sufficient Proof of such former Conviction.

XV. And be it further enacted, That no Person against whom any Bill of Indictment shall be found at any Assizes or Sessions of the Peace for any Offence against this Act, shall be entitled to traverse the same to any subsequent Assizes or Sessions; but the Court at which such Bills of Indictment shall be found shall forthwith proceed to try the Person or Persons against whom the same shall be found, unless, he, she or they shall shew good cause, to be allowed by the Court, why his, her or their Trial should be postponed.

XVI. Provided always, and be it further enacted, That on any Prosecution or Trial of any Offender or Offenders hereafter to be prosecuted or tried for any Offence against this Act, it shall not be necessary to prove that the Gold Coin received or paid or uttered contrary to this Act, is the Current Gold Coin of this Realm, but the same shall be deemed and taken so to be, if received or paid or uttered as such, until the contrary thereof shall be proved to the Satisfaction of the Judge, Justice or Court before whom any such Offender or Offenders shall be prosecuted or tried.

XVII. And be it further enacted, That all and every Act and Acts in force immediately before the passing of this Act, respecting the Coin of this Realm, or the clipping, diminishing or counterfeiting of the same, or respecting any other matters relating thereto, and all Provisions, Proceedings, Penalties, Forfeitures and Punishments therein contained or directed, not expressly repealed by this Act, and not repugnant or contradictory to the Enactments and Provisions of this Act, shall be and continue in full Force and Effect; and shall be applied and put in Execution with respect to the Silver Coin to be coined in pursuance of the Directions of this Act, as fully and effectually to all Intents and Purposes whatsoever, as if the same were repeated and reenacted in this Act.

XVIII. Provided always, and be it enacted, That nothing in this Act contained shall extend, or be construed to extend, to effect, alter or repeal any Clause, matter or thing in any Act or Acts made or to be made in this present Session of Parliament, whereby it is or may be enacted or provided that the Promissory Notes of the Governor and Company of the Bank of England, expressed to be payable to Bearer on Demand (called Bank Notes) shall be received for any Period in any such Act mentioned in Payment of all Sums of Money which are or shall become payable for any Part of the Public Revenue, and shall be accepted by the Collectors, Receivers and other Officers of the Revenue authorized to receive the same, if offered to be paid, fractional Parts of Twenty shillings only excepted; anything in this Act before contained to the contrary thereof in anywise notwithstanding.

XIX. Provided also, and be it enacted, That nothing in this Act contained shall extend, or be construed to extend, to alter or repeal any Clause, matter or thing in any Act or Acts in force in Ireland, whereby it is enacted or provided that all Sums of Money payable in Ireland, for any Part of the Public Revenue there, shall be accepted by the Collectors, Receivers and other Officers of the Revenue in Ireland authorized to receive the same, in Silver Bank Tokens of the Bank of Ireland, for Thirty Pence, Ten Pence, or Five Pence respectively, which shall be issued during the Continuence of the Restriction on Payments in Cash by the Governor and Company of the Bank of Ireland, if offered to be so paid; any thing in this Act before contained to the contrary thereof in anywise notwithstanding.

[This act was repealed, but in substance re-enacted by the Coinage Act of 1870.]

THE EFFECTS OF RESUMPTION IN GOLD BY CONTRACTION OF PAPER ISSUES.

1818–1822.

[Extract from minutes of evidence taken before the committee on the Bank of England charter, June 8, 1832.]

Examination of J. Horsley Palmer, esq.

No. 809.

Question. Are there any means of compelling the bank to provide a sufficient quantity of Gold?

Answer. The bank has only the means of obtaining an increased quantity if it be deemed desirable by contracting its issues, thereby creating a scarcity of Money and consequent fall in prices.

[Extract from a paper on variations of prices and value of currency since 1782. Journal of the British Statistical Society 1865, p. 294, by Prof. W. Stanley Jevons.]

VARIATIONS OF AVERAGES OF PRICE.

[On a scale of 100; the prices of 1782–'83 affording this basis being assumed to be 100.]

Year.	Gold.	Paper.
1810	142	164
1811	136	147
1812	121	148
1813	115	149
1814	114	153
1815	109	132
1816	91	109
1817	117	120
1818	132	135
1819	112	117
1820	103	106
1821	94	.....
1822	88	.....
1823	89	.....

[Concerning the question whether in the then condition of affairs Silver being everywhere Money (except in England) the maintenance of Silver as Money in England would have enabled her to cancel her paper without suffering so great a fall of prices, see remarks of Prof. J. G. Hoffmann, of Berlin (1832), reproduced on page 706, in which he estimates that English replacement of paper by Gold raised the rating of Gold to Silver by more than 4 per cent.]

EXTRACT FROM A SPEECH DELIVERED IN THE HOUSE OF COMMONS, AUGUST 6, 1869, BY RT. HON. R. LOWE, CHANCELLOR OF THE EXCHEQUER.

"There is another side to the transaction, and that relates to the question of an international Coinage, to which the honorable gentleman has called my attention. Well, the French Government have put themselves into communication with us. They have written to me on the subject of international Coinage, and wish to know what steps the Government of England are willing to take in the matter. I was in no condition to give any definite answer. The Chancellor of the Exchequer can speak with no other breath than that of the House of Commons, and until I know the feeling of the House of Commons I could not venture to give any opinion; but in my answer I ventured to go this far. There are two things perfectly plain—the one that, under any circumstances, we could not have any hope of establishing an international Coinage—on the chance of which I do not wish to dilate now—with a country that has two standards. France has a Gold and a Silver Standard. A Gold and a Silver Standard is not a double, but an alternate Standard. The two metals are always fluctuating in their relations to each other. It is in the nature of things for the cheaper metal for the time being to drive out the dearer. Therefore when the Silver Standard drives the Gold out of circulation, it leaves us nothing to compare our international Coin with except the Silver Standard, to which it would have no exact relation. And so I ventured to say, in answer to the question, that it would be impossible to hold out hopes of assimilation until France made up her mind to give up the Silver Standard and have only a Gold Standard; and I am happy to say that France is favorable to the abandonment of her Silver Standard, as I gather from the report of a commission on the subject, which I have received.

Again, it seems to me, on abstract principles, that we should never have an international Coinage unless the Coins were identical in weight and fineness, and unless the seigniorage charged on it were identical in both countries; because, if I am right in my view, that the value of Coin is affected by the terms on which it is put into circulation—that is, the

amount of mintage charged for it—then, on the supposition of having different mintages, we should have Coin put into circulation having different values. People would take their Gold to be coined where the thing could be done most cheaply, and thus the Coin for which the higher mintage was paid would be reduced in value by the more abundant produce of the cheaper mint. That is all I have ventured to say in reference to the matter to the French Government, and I trust that I have not gone beyond the proper limit in saying it. The conditions which I have mentioned are really elementary conditions of the whole question. But I wish here to point out that I believe it is possible for England and France, if they can make up their minds to give up a little of their prejudices for the sake of the great advantage of having an international Coinage, to obtain that object, I will just show the House how that could be done.

The French are proposing to coin a 25-franc Gold piece, 5 francs more than the Napoleon. That would be less in value than the sovereign by 22 centimes, or about 2*d*. If we were about to impose a seigniorage of about 1 per cent., or .993 of a grain, and take Gold to that amount from the Coin, our sovereign would be identical with the 25-franc piece. It would still remain as a current Coin in this country, of exactly the same value as now, and it would have the additional advantage that it would be identical in value with the 25-franc piece. But, in order that that might be done, France would have to make a sacrifice on her part. I forget the mintage she charges; I believe it is between a fifth and a quarter per cent. If she could be prevailed upon to make it 1 per cent., we should have solved the problem, as far as England and France are concerned, of an International Coinage. The operation would be performed by modifications of the same principle. France would, as now, take the payment in Money; England would deduct from her Coin, and thus equality would be obtained. It is singular to remark what a number of Coins in the world approach one another in value. The Spanish doubloon, the Russian Frederick, the half-eagle of America, approach exceedingly near in value to each other; and I think it very possible, if France would meet us in this way, should Parliament be induced to look at the matter from the point of view I have put it, we might come to some arrangement by which we should get the blessing of one Coinage throughout Europe—a great step in civilization. These are the remarks I had to make to the House. They are not given with any great confidence in my own opinion. All I am anxions to do before we separate is to give to honorable gentlemen and the country at large a subject for consideration. It appears to me that the subject is not so difficult as might be supposed; and that by a single measure we may secure to ouselves the great benefit of saving all the expense incurred on our own Gold Coinage, without imposing those expenses on anyone else, and at the same time of striking a Coin which would have the advantage of an international circulation." (Hansard's Parliamentary Debates, 3d series, v. 198, pp. 1419–1422.)

EXTRACT FROM A REPORT OF THE ASSOCIATION OF CHAMBERS OF COMMERCE OF THE UNITED KINGDOM.

(Session. Birmingham, November 16 and 17, 1869. Messrs. A. Field, S. S. Lloyd, Jacob Behrens, Ed. Akroyd, M. P., J. Whitwell, M. P., committee, London, 1870.)

"The Association of Chambers of Commerce of the United Kingdom, in a session. held at Birmingham the 16th and 17th of November, 1869, decided unanimously that a report should be presented in favor of the internationalization of Coinage.

In 1867, upon the invitation of the Emperor Napoleon, an International Monetary Conference met at Paris, at which were present the delegates of twenty nations, and at which England was represented by Mr. Thomas Graham, Director of the Royal Mint, and Mr. Rivers Wilson, attached to the Treasury.

Already France, Belgium, Italy, and Switzerland, whose united population represents 70 millions of inhabitants, had formed a monetary union in virtue of which their Coins, reduced to the same fineness, could lawfully circulate from one country to another.

At the Conference of 1867 it was not proposed that other powers should adopt the French monetary system, but merely that there should be an understanding with a view to the establishment of one or two international types.

The types proposed were the 25-franc piece, representing 1 pound sterling, and the 5-franc piece, or 4 shillings.

The piece most generally approved of as the best adapted to the object proposed was the 25-franc piece, and it is to that our observations will be directed.

The adoption of that piece will permit England to retain her present monetary system of pounds, shillings, and pence on condition of her reducing the value of the sovereign to 25 francs.

The United States likewise, in order to preserve their dollar and their cents, must reduce the 5-dollar piece so that it will be worth only 25 francs.

The same rule would hold good of all the countries which might desire to enter the monetary union; they might preserve all their present Coin for small change, but adopting at the same time a Gold Coin worth exactly 25 francs, 1 pound sterling, 5 dollars, etc.

In 1867, or since then, Austria, the United States, Canada, Sweden, Spain, Turkey, the Danubian Principalities, and the States of the Church have united themselves, or have shown themselves disposed to unite themselves, in a monetary union; to the preceding enumeration we might perhaps add China.

These countries allying themselves to France, Belgium, Italy, and Switzerland, represent fourteen nations [is China included?] almost on the eve of forming a monetary union without us.

On the other hand if England decides to become a part of this union, she will draw all the civilized nations into the movement; if she holds herself aloof a general and powerful monetary union will have been established without her assistance."*

Etc.

[The report then examines in detail the plan of reducing the sovereign to the weight of 25 francs, leaving the mint price undisturbed, and concludes in favor of the plan.

Among other suggestive remarks, I quote the following:

"In entering into the monetary union we suppress in part, if not entirely, these grave obstacles which oppose the development of our commerce. Great Britain, being the country which possesses the most important general trade, would be the country which would gain most from an international monetary system.

One of these obstacles which were to be removed was the following:

"In order to protect themselves from fluctuations of exchange, and guard against errors of calculation, dealers reserve for themselves a certain margin of price. These difficulties diminish our rates in the countries whose monetary system does not correspond with ours."]

* * * * * * *

[*These extracts are translated from Vol. I, pp 269 270, of the Enquête sur la Question Monétaire of the Conseil Supérieur du Commerce de Paris, 1872.]

THE RISE IN THE VALUE OF GOLD IN ENGLAND.

[The following important papers, written without view to any question of monetary controversy, may be advantageously compared with the statements made by the American Delegates in the Conference of the motives which have guided the monetary policy of the United States. If the conclusions of the first of the following papers are correct, the anti-Silver policy lately pursued on the Continent has wrought very appreciable havoc in English investments during the last five years: if the conclusions of the second paper are correct the value of Gold has increased in England more than twenty per cent. in this period, and a considerable portion of this rise is due to the Continental movement to adopt the English (Gold) Standard of Money.

The picture suggested by these statements concerning the late experience of England is a very sad one.

The words, a "Rise in the value of Gold," make a short and simple phrase, but the event they pourtray is a national calamity—it means an infinite variety, an overwhelming mass of human sorrow.

If it were possible for men with malice aforethought to conceive, and of their own power to execute a scheme, which should produce the results set forth in these papers, a new and colossal crime would have been added to the evil possibilities of human nature.

Fortunately this is not the case. The results attained are merely chargeable to legislation forced upon statute-books by a well-meaning *doctrinaire* agitation in favor of the Gold Standard. It is perhaps the first time in the history of the world that science has become politics on so grand a scale, and yet of course the intentions of science were good.

The results thus pourtrayed, however, the cause thus ascertained, inevitably suggest the query: Whether the prestige of sound learning will not suffer by this defeat of its representatives?

However civilized the age may be, it certainly will not be safe for

many centuries to come, to obliterate the barriers between learning and ignorance, the chimæras of socialism will sufficiently ravage our century at any rate; and the science of legislation cannot well afford to weaken itself for the struggle with them; and therefore, when a blunder of proportions so colossal has been made upon the advice of the accredited representatives of science, it is the vital interest of human progress that the error be repaired without delay. The palladium of Civil Prudence must be gently, and with consideration, but, if possible, speedily wrested from the hands of its unskilful bearers.

But such a reversal of policy, such a recognition of error, implies in the former champions of Gold-Monometallism a manliness of sacrifice which naturally requires time to perfect itself; but which, if it comes, will be a moral as well as an intellectual victory for science. And this necessary sacrifice must not be too long deferred. Else the popular sneers against science will be kept in countenance by the demoralizing spectacle of the *doctrinaire* monetary politician, reduced *ad absurdum*, fighting against truth to save his consistency: ready to sacrifice the prosperity of his people to his predilection for a Coin, and willing to break down the landmarks of property, in pursuit of a metric system which inevitably evades his grasp.

The date of the appearance of the following papers is itself suggestive of the difficulties to be overcome.

In the outset of the discussion of the general policy of European Demonetization, in 1876, the view was forcibly presented in the United States that *a priori* it was probable that a general rise of the value of Gold in Europe was already in progress, and that all known facts concerning prices pointed in the same direction.

This view became, in fact, a controlling ground of conviction of the necessity of Bi metallic Union.

The objection to contracting the Money of the world has had more effect in strengthening the policy of the United States than the parallel motive given by the necessity of the steady par of exchange between Silver and Gold countries, the loss of which has borne more disastrously upon other countries than upon the United States.

On the other side of the Atlantic, however, this inherent probability of a rise in the value of Gold has been, to a great degree, ignored, and indeed an effort has been made in tone-giving circles* to counteract the presumption that contraction of Metallic circulation (by reduction of Coin to bullion, checking coinage of bullion, and making existing Silver Coin inexportable) would naturally produce contraction of prices and a crisis.

The argument made use of consisted in this fact, that prices had been rising since, and by reason of, the Gold discoveries and their flood

* See Erwin Nasse, "*Der Bimetallismus und die Währungsfrage in den Vereinigten Staaten*, 1878"; Prof. W. S. Jevons' "Paper on the Silver Question, before the American Social Science Association," 1877, cited also in Horton "Monetary Situation," 1878.

of metal, as well as that in late centuries prices had been rising as a rule, and it was assumed that this process was still going on, that the supply and demand were the same after 1872 that they had been before.

It was therefore not difficult to dispose of this argument effectually by pointing to the probability that in these times of completed means of intercommunication an inundation from the mines, in its influence on prices, spent itself speedily; and that what little rise of Gold-prices was noted after 1861 was attributable not to a redundant production of the mines, but to the displacement of specie by paper in the United States and in Italy (1861–66).

The original presumption, therefore, the plain proposition, which was one of the foundations upon which the policy of the United States was based, remained in force. Nevertheless, it failed to receive corresponding recognition at the hands of European Governments.

The argument with which the Gold Standard agitation set out, viz, that Gold was steady in value, has now suffered decapitation—that is, if the facts set forth by Mr. Giffen are correct—and the close application of ideas drawn from the Metric System to a "Measure" which contracts itself more than twenty per cent. before one's eyes, is showing itself to the public in all its native simplicity.

After all these years, therefore, the scientific Bi-metallist is at length, in legal parlance, in position to file his *bill of interpleader*, and ask that the two wings of the army of the Gold Standard be compelled to make good against each other their opposing claims to the possession of monetary truth, while the Bi-metallist assumes the part of a spectator.

It is now in order that the Teutonic or Latin persecutor of Silver, the Continental monetary reformer, who, in the effort to substitute Gold for Silver, has brought the world of production and of exchange to its present condition, shall ascertain from the Anglo-Saxon's insular, but thorough experiment, whether, in these late years, the yellow metal, Gold, which the Anglo-Saxon possesses in fuller measure than his Continental brother, has actually maintained itself as a rightful member of the Metric System, steady in value, unshakable in its purchasing power.

The litigation of this subject will probably assist in bringing into clear light the services rendered by the exclusion of Silver from Coinage and Legal Tender, not only to mankind but to England.]

Extract from an article by Prof. J. THOROLD ROGERS (of the University of Oxford) upon the "Causes of Commercial Depression," in the Princeton Review for January, 1879.

"But despite these advantages, there is no doubt that prices, profits, and wages are falling in very many industries which have hitherto been prosperous. We will attempt to enumerate the principal causes which have effected this result. Some of them are local; some are shared with other countries.

The first cause in importance, the most general, and in all probability

the most enduring, is the rapid rise in the economical value of Gold. The fact has been commented on with considerable but unequal force by M. Laveleye, in a recent number of the *Revue des Deux Mondes*, where he alleges, and on good grounds, that the annual produce of this metal is not more than sufficient to cover the annual wear and tear of the currencies. But while the area of civilization is widening, and therefore the demand for an adequate currency is being extended, the most populous state of Europe has abandoned a silver for a gold currency, and has had, as a fruit of its successful war with France, an exceptional power of attracting gold to itself, with singular success indeed, but to the incredible misfortune of its people. Germany has effected a monetary revolution on the grandest scale, and has beggared its own industries, for the rise of prices in Germany during the four years after the French war was over was unparalleled. Now it is perfectly true that when a gradual scarcity in the amount of the metallic currency circulating in any one country occurs, it is to a certain extent possible to resist a general fall in prices by using substitutes for the precious metals, especially if the country in which the scarcity occurs is willing to adopt such substitutes with confidence and familiarity. But unless we are to assert that the values of gold and silver do not depend on the demand which exists for them and the means for supplying that demand, it must follow that a large demand brought to bear on a limited supply will affect the values of these precious metals, and through them lower prices. Nor do European countries find themselves generally able to circulate the equivalents of a metallic currency to the extent which, for example, England does. The treasure held by the Bank of France is enormous, being nearly equal to its note circulation. It is understood that Germany has a considerable hoard of gold coin and bullion, which for all practical purposes is withdrawn from circulation. But to the general fact that those two countries require a far larger amount of money for purposes of trade than England does—France is supposed to need three times as much—must be added that the political relations of the two countries are so far unsatisfactory as to suggest a further strengthening of their monetary position. Nations do not keep more gold and silver than they need; but they measure their own needs, and sometimes their fears measure their needs for them.

Taking into account the growing intercourse of civilized nations, and particulary the sensitiveness which they feel at any event which may check the activity or derange the machinery of trade and production, it appears that at no time has the drain on the existing stock of gold been so sharp and so rapid as at present. Nor does the proof of the fact depend solely on the phenomenon of lowered prices, or in the fact that the demand for gold has been exceptionally great. It is proved by the decline in the value of silver as compared with gold. The writer has been informed by those who are best competent to give an opinion that no traceable rise in prices has occurred in those countries which use a silver

standard only, and that this is particularly the case in India, where the loss which the government incurs arises from the necessity of meeting liabilities due to England in a currency which has increased in costliness by all the difference between the old and the present value of silver as measured by gold. But it will be plain that when the dearness of gold is manifested by a fall in prices there must be a loss of profits, not only on stocks which have accumulated under the agency of higher prices, but on those parts of a producer's capital which were called into permanent existence while these higher prices ruled, on buildings, plant, and machinery. It may be added, too, that low rates of profit do not depress wages with corresponding energy, just as high rates of profit do not raise wages correspondingly. In other words—and the fact may be proved by the evidence of prices taken at different periods in the last six centuries of English economical history—labor has always been far better off when prices were falling, owing to the increased value of the precious metals, than at epochs when, owing to their abundance, or to other equally energetic causes, prices were rising. But it is a commonplace in political economy that, except in the case where the employer can recover himself at the expense of rent, dear labor is always accompanied by a reduction of profits."

EXTRACT FROM A PAPER ON THE FALL OF PRICES OF COMMODITIES IN RECENT YEARS, BY ROBERT GIFFEN, ESQ., IN THE JOURNAL OF THE LONDON STATISTICAL SOCIETY FOR MARCH, 1879.

[Read before the Statistical Society, 21st January, 1879.]

There is a general agreement that during the last few years there has been a heavy fall in prices. The fall in cotton and iron, and the various manufactures of cotton and iron, is notorious, and for the rest the losses in trade, in almost every description of business, have been such as to leave no doubt of a fall in price. It is usually a fall in price which cripples the weaker borrowers, and causes bad debts, and this makes a beginning of losses by which stronger borrowers are in turn crippled, farther falls in prices ensue, and more bad debts and losses are produced. When we see so many failures as are now declared, therefore, we may be quite sure that they are preceded and accompanied by a heavy fall in prices. But the question for statisticians in such a matter is not the fact of a general fall, but whether it can be measured and compared with other facts of a similar kind, and whether there is anything to show the fall to be of a more or less permanent character, and not merely a temporary fluctuation which will be corrected by an immediate rebound; in other words, whether the average of two or three years, including the present, will or will not exhibit a decline when a comparison is made with a date two or three years back. Looking at the matter in this more

definite way, I have come to the conclusion that not only is there a decline of prices at the present time from the high level established a few years ago, but that this decline is more serious than the downward fluctuation of prices usually exhibited in dull times, and that it may be partly of a permanent character unless some great change in the conditions of business should occur at an early date. I think this can be shown without difficulty with the help of some well-known figures which have been published lately, and which I propose to analyze and sum up, after which I shall proceed to discuss the causes of this apparently serious decline in prices, and some of the probable consequences.

I.—EXTENT OF THE FALL.

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[Six pages omitted.]

The general effect of all these figures may now be summed up. First, it has been shown by a general table of prices at the beginning of each year, from 1873 to 1879 inclusive, that there has been a general and remarkable fall in the prices of wholesale commodities in the period, this fall having also been to a large extent continuous, and amounting in the end, with three exceptions only, to between 26 and 66 per cent. Second, it would appear from a comparison of prices by means of the index number in the "Commercial History and Review," that the average fall between 1873 and 1879 is 24 per cent. and that the level of price now established is lower than anything recorded since 1850 in the tables referred to, these tables comprising the years 1857 and 1858, and each year since 1865 inclusive; further, that although the fall between 1865 and 1871 appears greater by this index number than between 1873 and the present time, yet there is a special explanation of this, and there is reason to believe the present fall to be unusually great. Third, it has been shown by certain tables of Mr. Ellis's that as regard food and raw materials, prices at the beginning of 1878 were lower than in 1869, one of the years of depression following 1865, while prices are now considerably lower than at the beginning of 1878. Fourth, it has been shown as regards the prices of exports, that the average in 1877 was considerably lower than in 1868, while the fall to the present level was from a lower height in 1873 than the previous fall in 1868–'70 from the height of 1865. Allowing for the further fall of prices in 1878, we are confirmed in the belief that prices are now unusually low, and that the facts shown by the first index number cited rather understate than overstate the change. In other words, it is ascertained by the concurrent testimony of all the facts examined, that prices of commodities are unusually low, though one of the sets of the figures would seem to throw doubt on the idea that the fall from the height of an inflated period to the present depth is unusually great. The preponderance of

evidence seems, however, to be that there is an unusual fall, although it began from a lower level than what had been established in the previous inflated period. I have not attempted, however, to measure exactly what the extra depreciation is, though I should be inclined to put it at between 10 and 20 per cent. below the prices of 1868–'71. In these matters great exactness is impossible; without waiting to aim at great exactness, I have thought it would be useful to bring the rough facts together, pending the more elaborate efforts which I trust some of our members—perhaps Mr. Jevons—may be induced to attempt.

II.—CAUSES OF THE FALL.

* * * * * * *

[Six pages are here omitted.]

[In these the author treats, *first*, causes general in their nature, of speculations, and frauds, etc., etc.; *secondly*, of the bad harvests in England in 1875, 1876, and 1877.]

A *third* cause which must be mentioned is the extraordinary demand for gold for the new coinage of Germany, and for the United States on its resumption of specie payments during the last few years. It is a little difficult to consider this point except in connection with the question of the supply of gold, and any variation in that supply which may have occurred, but what I desire to bring out is that apart from a permanent diminution of the supply, whether absolutely or in relation to the growing wants of the world, which would necessarily have a permanent effect on prices, extraordinary demands like those referred to would tend to produce a momentarily extreme fall. The reason is that a sudden pressure on the stock of the precious metals at a given period tends to disturb the money markets of the countries using them; makes money dear, or creates a steady apprehension that it may at any moment become dear; and so by weakening the speculation in commodities and making it really difficult for merchants and traders to hold the stocks they would otherwise hold, contracts business and assists a fall in prices. It is conceivable that after such a pressure the current supply of the metals may again be found sufficient to meet the current demands with prices raised to their former level; but while the pressure lasts prices are low.

Now the extraordinary demands of the last few years—I think I may say eight years, the German lock-up having commenced in 1871—have certainly been of a kind to produce some momentary effect, even on the assumption that the supply of gold, when the pressure is removed, remains sufficient for the wants of the world with prices at their former level. Altogether during the last six years Germany has coined 84 millions of gold, very little of this being recoinage. The accumulation of gold in the United States, again, principally during the last two years, amounts to about 30 millions sterling, the stock of gold in the country

above what it had for several years previous having been increased by that amount. These two sums amount to 114 millions, and if we allow for other extraordinary demands such as that for Holland, which has been substituting a gold for a silver money, and at the same time make deductions for what Germany may have recoined, we may say in round numbers that the extraordinary demands for gold during the last eight years have amounted to 120 millions; or 15 millions a-year. As the annual production of gold eight years ago was estimated at from 20 to 22 millions only, and has since rather fallen off, as we shall presently see, it is quite plain that these extraordinary demands can have left very little for the ordinary wants—the wear and tear of coinage, losses, use in fine arts, and new coinage to correspond with the wants of populations increasing in numbers and wealth. My own calculation in 1872, in a series of articles which I then wrote, was that for many years previous the average requirements of the gold-using countries, excluding both Germany and the United States, which were not then in the list, had been 12 millions annually. But if you deduct 15 millions from 20 or 22 millions, you have much less than 12 millions left, and consequently the former state of things as regards prices could not have been maintained during these eight years. Now that the extraordinary demands are over, prices may recover, but the extraordinary demands must have contributed to the present adverse fluctuation.

These three causes, then—the extreme and prolonged discredit, the bad harvests, and the extraordinary demands for gold—appear to me to have concurred in bringing prices of commodities to the lowest level which has been reached at any period for many years. That they would be sufficient to account for much of the effect which has been produced can hardly be disputed, and that they have existed is beyond all doubt.

The question is infallibly suggested, however, whether in addition there is not a subtler cause at work—an actual insufficiency of the current supply of gold for the current demands of gold-using countries. This is quite a separate question from the effect of the extraordinary demands which have been described, and it seems to me most important that we should keep it separate. It is a subject infinitely more complex and difficult to treat, and one on which even the most skilled, I believe, would venture to give an opinion with far more diffidence than on the effect of the extraordinary demands themselves.

My own opinion is that some such cause may have been at work, though whether its effects would have been at all marked as yet, in the absence of the extraordinary demands, may be doubted. The main presumptions to this effect are—*first*, the undoubted falling off of the gold supplies during the last twenty years. I have reprinted in the Appendix (Table IV) that portion of the table put in by Sir Hector Hay in his examination before the silver committee which relates to the production of gold, as containing, I believe, the most generally accepted estimate of what the gold production has been. The following is a summary of

that table in quinquennial periods, with the annual average for each period:

Estimated Production of Gold in the Years 1852–'73, *in Quinquennial Periods, with the several Averages for each Period.*

Period.	Total production.	Annual average.
1852–'56	£149, 665, 000	£29, 933, 000
1857–'61	123, 165, 000	24, 633, 000
1862–'66	113, 800, 000	22, 760, 000
1867–'71	108, 765, 000	21, 753, 000
1871–'75 (4 years)	76, 800, 000	19, 200, 000

The dwindling of the supply in this table is very marked, and naturally suggests that the effect on prices of the great gold discoveries may not have been continued much beyond 1861, while lately the difference is so great that, even apart from extraordinary demands for gold, that effect may have been reversed. The difference of an annual yield of from 25 to 30 millions between 1852 and 1861 and an annual yield of less than 20 millions at the present time is palpable. Of course the question is not settled by this consideration. One of the effects of the great gold discoveries was to create new markets for gold itself. Under its bi-metallic *régime* France replaced an enormous stock of silver by gold, and becoming a gold-using country, absorbed the new supplies to an enormous extent. India again absorbed an immense sum, especially during the years of the cotton famine, when her credit abroad was so suddenly and so enormously augmented. Until 1866 it may be said the market for gold was so affected by extraordinary demands that there was hardly time for prices to settle down into a normal state, and the full effect of the new supplies on gold-using countries alone was never fully tested. But it is at least obvious that the diminished supply could not now meet the extraordinary demands which were met by the supply of the earlier years, even if the ordinary demands have continued the same.

I should add that not only do the figures show an actual falling off of supply, but there is a probability of the supply being obtained at a greatly increased cost of production. The nineteen millions now produced are obtained with more effort than the thirty millions twenty years ago. This means that if prices were to tend upwards, a check might be put upon the movement by a still farther falling off of the gold supply. It might not pay to work mines which are now profitable if prices all round, necessarily including wages as well as commodities, were to rise.

We come, then, to the question whether ordinary demands have continued the same, to which the answer must, of course, be that coincident with the gradually declining supply of gold there must have been an enormous increase of current demands. The increase of population in the gold-using countries alone must have been nearly 50 per cent.

In the United Kingdom alone, the annual rate of increase has been for long nearly 1 per cent. per annum, 0.83 per cent. between 1861 and 1871, which gives 28 per cent. in thirty years, while in the Australian colonies the rate of increase is, of course, much greater. Suppose the world's annual supply of gold before 1848—say six millions sterling—was quite sufficient to maintain equilibrium then, which I doubt, the natural increment of population, assuming it to be no more wealthy and to use no more coin per head than the population before 1848, would make the present usual requirement from the gold-using communities in existence before 1848, or their descendants, about 9 millions. But the wealth per head has increased enormously. In the paper I read last year on Recent Accumulations of Capital in the United Kingdom, the rate of increase in the ten years ending 1875 was estimated at 27 per cent., and this rate of increase being deduced from the actual rate of increase in the assessments to the income tax, is not subject to the doubts which may be entertained respecting the totals of the accumulations themselves. Whatever the figures may be at the beginning and end of the period, such has been the rate of increase. Not only then must the requirements of gold-using people be increased by 50 per cent., to allow for the natural increment of population, but another 50 per cent. must be added for the greater wealth per head. This would further raise the usual requirements according to the previous 1848 standard from the above sum of 9 millions, which allows for the increase of population only to 13½ millions. The same conclusion is reinforced by a consideration of the quantities of goods dealt with in our principal industries. The production of coal in 1846, as you will see by reference to Mr. Mundella's paper last year, was estimated in 1846 at 36,000,000 tons; in 1876 it was 133,000,000 tons: or about three times as much. Between 1854 and 1876, or little more than twenty years, the production was rather more than doubled. The production of pig iron again has increased between 1840 and 1876 from 1,396,000 to 6,556,000 tons, or about five times in less than forty years. The entries and clearances of ships in the foreign trade again have increased from 13,307,000 in 1848 to 51,531,000 tons in 1877, or nearly quadrupled. The imports of raw cotton again have increased from 6 million cwts. in 1848 to more than 12 million cwts. in 1877, or 100 per cent.; and although this seems less striking than some of the previous figures, it is to be noticed on the other side that the exports of cotton-piece goods have risen from 1,096,751,000 yards in 1848 to 3,838 million yards in 1877, or nearly four times. But it would be needless to multiply instances. The peculiarity of the period has been the increase of mechanical invention and the constant augmentation of goods, so that the accumulation of capital above shown is even in less proportion than the increase of the movement in trade which the money in use has to move. It is a moderate calculation that if only the countries which used gold in 1848, including their colonies, were now using it, the requirements to corre-

spond with the increased population and wealth would be at least three times what they were, assuming prices to remain in equilibrium.

Nor is this all. The extension of the area of gold-using countries since 1848, first, by the practical inclusion of France, and next, by the more recent inclusion of Germany and the United States, has no doubt added to the usual demands to an extent it is unnecessary to determine exactly, but at least by several millions. Thus while during the last thirty years the annual yield of gold has been falling away from its first superabundance, the current demands for the metal have certainly been growing with marvelous rapidity. If there was much need twenty years ago of new channels for the new gold supplies to prevent an enormous rise in prices, it is at least possible that more recently the increasing current demands have been sufficient to use up the diminishing annual supply. So far as we can judge, the point of junction of the two curves must have been at some date within the last ten years, though in such matters precision is of course impossible. In this view the fall of prices in the last ten years has been aggravated by a subtler cause than the extraordinary demands for Gold which have existed. These demands have come upon a market which apparently had no surplus to spare. They have consequently been supplied very largely by a continued pressure upon existing stocks, till an adjustment has at length been made by a contraction of trade and a fall in values.

It may be said, perhaps, that the usual requirements of gold-using countries have been changed from what they were by the extension of the cheque and clearing house system, by the diminished use of gold in the arts, and by similar means. Perhaps there is some diminished use of gold in the arts, but, of course, the only really important question in this matter is the use of gold in coinage, and I should doubt if any great economy in the use of gold has been established in the last thirty years. Excluding Germany and the United States, which have just been added to the number, the principal gold-using countries besides the United Kingdom and its colonies are France, Portugal, Egypt, and the South American countries, but it would be difficult to show, I think, the check system or any other system of economising money has been greatly extended in those countries in the period. In the United Kingdom again all the recognized expedients for economising money—especially the cheque and clearing house system—seem to have been fully operative thirty years ago as they are now. The United Kingdom was very fully "banked" before 1850, the growth of banks and banking business having since been no more than in proportion to the increasing wealth of the community. The circumstances are such, however, that a considerable allowance may be made for the introduction of economising expedients, without altering the fact that the current gold requirements of the world have increased enormously since 1848, while the annual supplies which threatened an incalculable rise of prices have been dwindling away.

Let me add, that whatever doubt may be entertained as to the actual meeting of the two curves of demand and supply of gold during the last few years—apart from extraordinary demands—all the facts and circumstances seem to indicate that the meeting point must come very soon unless the supply of gold is increased, or economising expedients introduced and extended. At the recent rate of progress the current demands may be expected to increase at least 20 per cent. every ten years, so that if 20 millions annually are now just sufficient for all purposes, not less than 24 millions will be required ten years hence. In another ten years the annual requirement will be more nearly 30 millions. If we start from a lower total now, say from 16 millions, all the same the figure of 20 millions will soon be exceeded. And this without leaving any margin for extraordinary demands, which experience seems to show are never wanting, so that, as in a budget, allowance should be made for the unforseen as in some sense more certain than all that is exactly forecast. If the scarcity of gold has as yet contributed very little to our money troubles or the fall in prices, it must at least be about to have that effect if no great change comes. Whether such a change is likely to come in the shape of an increased gold supply it will be for geologists and mineralogists to judge, but it is not reassuring to see how little comes practically of the recent gold discoveries in India and the re-discovery in Midian. Whether on the other hand change may come in the shape of economising expedients will be a point of no little interest for bankers and all other business men, and for legislators. Considering the slowness with which such expedients become effective when they are first introduced, and the perfection to which they have been brought in countries like England where they are introduced, I feel great doubts whether much relief can come in this way. On the whole, I see no other outlet from the situation than in the gradual adjustment of prices to the relatively smaller and smaller supply of gold, which must result from the increasing numbers and wealth of the populations of gold-using countries.

III.—WHAT THE FALL EXPLAINS AND ITS CONSEQUENCES.

The fact of a fall of prices such as has been described explains a good many things, while the consequences of it, or, to speak more correctly perhaps, of the more permanent of the causes which have contributed to it, must be far-reaching. There are one or two topics of importance in this connection on which I have a few brief remarks to offer.

First, we have a sufficient explanation in the fall of prices of much of the falling off of trade, especially our foreign trade, which is the occasion of so much alarmist writing. There is a constant assertion by some writers of two alleged facts, one, that our foreign trade is diminishing, the other, that foreign countries are gaining as we lose, from which the inference is that the decline of our trade is to be accounted for by the successful competition of foreigners. Indeed, it is sometimes said that the foreigner is taking the bread out of the mouths of our manufacturers and the men whom they employ. I have never seen this view supported by any careful examination of what the growth of the trade of foreign countries really is, or by a consideration of what

goes on in our trade generally, and not merely in particular trades which may be affected here and there by the pressure of foreign competitors; but the question of the fall of prices appears to open up a new view. What if there is no falling off, or no material falling off of our trade at all, so that all this writing about our decaying trade, and the gain of foreigners at our expense is only so much writing in the air? It is clear that an average fall of 20 or 30 per cent. in prices must make all the difference in the world. We are not left to conjecture in the matter. The exports of British and Irish produce show a falling off in total value between 1873 and 1877 of about 22 per cent.

The exports in 1873 were	£255,165,000
" in 1877 "	"198,893,000
Reduction	" 56,272,000

which is almost exactly in the proportion stated. But we have already seen that while the index number of 73·1 falls to be increased in 1873, when a comparison is made with 1851 prices, by the sum of 20·60, the index number falls to be decreased in 1877 by 2·04, so that there has been an average fall of price between 1873 and 1877 of more than 20 per cent.* There is nothing in the figures then to imply that the quantities of the articles exported in 1877 were less than in 1873. To throw farther light on the point, I extract from the report to the Board of Trade already referred to, a table in which the prices of the articles of export enumerated in the statistical abstract, according to their declared values in 1873, have been applied to the quantities exported in 1877. The result is, that while the aggregate declared value of these enumerated articles in 1877 was 147,801,000*l.*, their aggregate value at the prices of 1873 would have been 191,530,000, which is within a million of the aggregate value of the exports of the same articles in 1873. There are variations in the quantities of the articles, some increasing, and others diminishing between 1873 and 1877, but the upshot is that if the prices of 1873 had been maintained all round in 1877, the returns as far as the enumerated articles are concerned, and presumably as regards the remaining articles of trade where the entries are mostly by value only, would have exhibited no decline at all.

It cannot be maintained, of course, that a fall of values only is immaterial. Profits depend on price, and this is an especially important consideration in the foreign export trade as regards articles exclusively or mainly of British origin, and where a large part of the value is not constituted by the cost of the raw material previously imported. Our trade may consequently be less profitable, though the quantity we turn out has not diminished. But other countries must suffer by the fall in price exactly as we do ourselves, and the question here is not of the profitableness of the trade at a given time, but of its extent; and as to this the impression that our foreign trade has diminished to any material extent during the last few years may be pronounced to be absolutely without foundation. Regarding profit, moreover, I may be allowed to say in passing, a good deal might be urged in favour of a time like this being really the most profitable in the end, notwithstanding all the complaints of depression. Much of the prosperity of years like 1873 is in reality hollow, and much of the dullness of dull times is due to the fact that people are forced to acknowledge themselves not so rich as they thought. But this is perhaps taking us away from the matter in hand, which is that of the volume of our trade only.

To be quite fair, it must be acknowledged that holding our own in such matters is not all that is necessary. If business is to be in a real equilibrium, there should be a steady increase in it *pari passu* with the increase of population. There has been some real check then to the growth of our foreign trade during the last five or six years. But on the other hand, we must remember that previous to 1873 there was a marvellously rapid growth, much above the annual average. All things considered, it is yet too soon to complain of the check of the last five years as indicating the beginning of a permanent retrogression.

*And exclusive, of course, of the additional fall in 1878.

The *second* point I shall advert to is the possible connection between the appreciation of gold and the depreciation of silver. It is an obvious enough suggestion that as silver in the markets of gold-using countries is only a commodity, it will probably sympathise with any general movement in the prices of commodities. Indeed, it has been urged by the Calcutta government that it is not silver which has changed but gold. Silver prices they say have not perceptibly risen in the Indian markets, although gold has risen. Without going into detail on this subject, which would take up a whole paper by itself, and which we may safely leave to Mr. Bourne when he comes to read his paper on the silver question, I may be allowed to remark that very likely gold and silver have *both* changed. One or two of the causes we have described as likely to produce a general fall in prices—the prolonged discredit and the bad harvests—have been as applicable to silver-using as to gold-using countries, and have surely been applicable to India and China with their tremendous famines and much rottenness in their foreign trade. It was therefore possible that silver prices should have fallen like gold prices, and the relation between the two metals have been left unchanged; if silver prices have been stationary, or have not fallen so much as gold prices, then as we cannot be sure how much the scarcity of gold has aggravated the fall of prices here, it is difficult to argue from the fall of silver in relation to gold that the difference between them arises from an appreciation of gold only. There may have been depreciation of silver as well, even if of a temporary kind only; the events of the last few years relating to silver—especially the sudden sales of the stocks of German silver, and the stoppage of silver coinage by the Latin union—being calculated to have that effect. The wonder perhaps rather is that silver has not depreciated still more. Possibly the stock in use in the silver countries is so large that great additions can be easily absorbed; but, the change has yet to be tested, we must remember, by a period of good business and naturally rising prices in the silver-using countries. So far as it goes, however, the depreciation of silver in relation to gold, whatever changes may have occurred in silver itself in relation to other commodities, is not inconsistent with the supposed change in gold in relation to such commodities.

A *third* point to notice is the connection between a great fall in the prices of commodities and a fall in wages. The two things are inseparably connected. First, in certain trades—and this connection has been specially shown of late years in the iron trade—the gross price of the articles produced is so much diminished that if the cost of labour is unaltered the labourer will be receiving an enormously increased share of what is produced. Say an article formerly selling for 20*l.*, the cost for labour being one-fourth, or 5*l.*, falls in price to 10*l.*, then the 5*l.* given to the labourer would be 50 per cent. of the selling price. It is incredible that so great a change could occur without the labourer being affected, and there have been even greater changes in the iron and coal trades.

But, *second*, in almost all trades, especially those in which the cost of labour constitutes a large part of the cost of production, there is necessarily some connection, in the long run, between the money rate of wages and the prices of the usual articles of the labourer's consumption, according to his standard of living. It would take us out of our way to enter into a controversy here about the wages-fund, but it is quite plain that the real wages paid by the capitalist to the labourer consist mostly of commodities; if money wages remain the same while commodities fall in price, there is an increase of real wages. In some way or other, then, an adjustment of money wages to reduced prices becomes inevitable. In miscellaneous industries this may be effected by the constant action of individual interests when changes of employment occur; by the steady substitution of superior for inferior workmen; by the transfers of business enabling wages of clerks and others to be revised; and by similar means. In more conspicuous trades, where large groups of men are employed, there are notices of reduction on a large scale as well as these minor instruments of effecting a reduction. But nominal reduction must come somehow, unless there is to be a real rise in wages. The visible opportunity of employers is of course the scarcity of employment, and the disorganisation of industry which attend a great fall of prices; but employers would obviously be unable to continue paying for any length of time really increased wages. There is no Fortunatus's purse which would not quickly be exhausted in such an attempt.

There is another subject of, perhaps, greater complexity which seems to be suggested. If a general downward movement of prices, due to a comparative scarcity of Gold, has begun, are we not on the eve of a reversal of the changes which commenced with the Australian and Californian discoveries—changes so admirably described in Mr. Jevons's well-known book? These changes were substantially a gradual lightening of debts for the benefit of the debtor class, and to the immediate loss of annuitants and capitalists however much the latter might be compensated in the end by an increase in the nominal income of their land, houses, and other securities. Now we may witness a gradual increase of the burden of debts to the loss of debtors, and for the immediate advantage of creditors, although, in the end, the latter may lose by the relatively diminished nominal income of their securities, following the adjustment of all prices to the new circumstances. There can be no doubt that some such general effect as this must follow, if it should, in fact, turn out that a serious appreciation of Gold has set in, and the circumstances of its production and the use of economising expedients do not change. In the end the effect in contracting trade is looked forward to with some apprehension by many of our best authorities.

I do not propose to dispute this conclusion here. It would land us in an almost endless controversy if we were to discuss whether a constant influx of new money, leading to a prolonged rise in prices, does more good or harm in the long run, than a constant failure of new supplies to

meet current demands leading to a prolonged fall in prices. A great deal, I imagine, could be said on both sides; the rebound from excessive inflation more than compensating perhaps all its alleged benefits, and the additional fall in prices, due to a gradual scarcity of gold being as nothing when compared with the falls which take place from time to time owing to the simple failure of credit. But while avoiding this discussion, I may at least point out that the most serious effects of this incipient gold scarcity will probably be gradual, just as the effect of the discoveries in causing a rise of prices has been much more gradual and confined within narrower limits than economists were in the habit of anticipating. Particularly at the present moment the depression may have gone so far that the accumulating stocks of the precious metals will be sufficient for a good while to support a considerable expansion of trade—that it will only be later on, as prices tend to get back to the former level, that the real pressure of the scarcity will be felt. A year or two's ease in the money market following the events of last year will however be no proof at all that the causes above described have not been operative and will not again be operative.

IV.—CONCLUDING OBSERVATIONS.

In bringing this long paper to a close, I have only one or two practical observations to offer. The "moral" of much that has been said is clearly this: that, if possible, the scarcity of Gold which has contributed to the present fall of prices, and may have farther serious effects in future, should, if possible, be mitigated, and should at any rate not be aggravated, by legislative action. I have expressed great skepticism as to whether, in fact, seeing how slow men's habits are to change, any mitigation is probable in the shape of expedients for economising money. But it must be recognised that if bodies of men were amenable to reason in currency questions, and there was really a widely felt belief of serious mischief impending from a gold scarcity, some economising expedients could be tried. To give only one illustration: I suppose few things are more unlikely than that 1*l.* notes, or notes for less than 5*l.*, will again be reintroduced in England, but the introduction of such notes alone, with all suitable arrangements for their convertibility, would certainly go far to neutralise even such another extraordinary demand as that for the German coinage. The German demand for gold would itself have been much smaller than it was, but for the banking reform which accompanied the coinage, and part of which reform was the abolition of notes of small denominations. The United States' pressure for gold during the last few months would also have been far more serious than it has been, if the Government of that country had complicated its resumption arrangements by the abandonment of all greenbacks of from 5 to 25 dollars, and the prohibition of bank notes for such amounts. There seems a possibility of gaining something then by reintroducing 1*l.* notes if the present gold scarcity should continue. I hope I shall not be un-

derstood as advocating such a change, or as being insensible to the weight of many practical objections which could be urged against it if it were immediately proposed. I am only mentioning it as a possible expedient for economising money, and there are no doubt others. As regards small notes, however, it would seem that at least any change by countries which still retain them in the direction of their further abolition, leading to a greater demand for the precious metal, ought to be deprecated. Still more we ought to deprecate any change in silver-using countries in the direction of substituting gold for any part of the silver in use. It would be nothing short of calamitous to business if another demand for gold like the recent demands for Germany and the United States were now to spring up. Even a much less demand would prove rather a serious affair before a very long time elapsed.

I.—*Prices of leading wholesale commodities in January of each of the undermentioned years.*

[The quotations, with the exception of two New York quotations, are those of leading wholesale markets in the United Kingdom.]

	January, 1873.	January, 1874.	January, 1875.	January, 1876.	January, 1877.	January, 1878.	January, 1879.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Iron, Scotch pig ..... per ton	127	107 6	80	64 3	57 6	51 6	43
Coal, Helton ..... do	} 30	27 6	30	25	19	18 6	19
Wallsend ..... do							
Copper, Chili bars ..... do	91	84	83 10	82	75	66	57
Tin, Straits ..... do	142	120	94	82	75 10	66	61
Wheat, Gazette average ..... per qr	55 11	62 1	44 8	45 9	51 6	51 9	39 7
Red spring, at N. York ..... per bus'l	$1 70	$1 69	$1 22	$1 33	$1 45	$1 45	$1 10
	£ s. d	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Flour, town made ..... per sack	47 6	53 6	38 6	42 6	40	46	37
New York price ..... per br'l	$7 50	$7 10	$5 15	$5 50	$6 00	$5 50	$3 70
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Beef, inferior ..... per 8 lbs. by the carcase	3 10	3 9	3 8	4 3	.....	.....	.....
prime small ..... do	5 3	5 5	5 5	5 3	5 2	5	4 9
Cotton, mid-Upland ..... per lo	10	8⅛	7¼	7	6⅞	6½	5⅞
Wool ..... per pck	23	19 15	18 5	17 10	16 10	15 10	13
Sugar, Manilla, Muscov ..... per cwt	21 6	18	17	15	22	14 6	16
Coffee, Ceylon, good, ordinary ..... do	80	112 6	84	90 6	87 6	84 9	65
Pepper, black Malabar ..... per lb	7	8½	7	5¾	5 1/16	4⅝	4¼
Saltpetre, foreign ..... per cwt	29	23 9	22 6	18 6	20	22	19

II.—*Wholesale prices*, 1845–1877.—*Proportionate results.—Deduced from a table of prices on the basis of representing by the number* 100 *the average prices of the six years* 1845–'50.

Dates.	1. Coffee.	2–3. Sugar.	6. Tea.	7. Tobacco.	9. Wheat.	10–13. Butcher's meat.	15. Cotton.	16. Raw Silk.	17–18. Flax and Hemp.	19–22. Sheep's Wool.	24. Indigo.	25–27. Oils.
1845–'50, Average 6 years	100	100	100	100	100	100	100	100	100	100	100	100
1857, 1st July	151	123	162	210	118	105	95	204	121	146	121	141
1858, 1st January	114	83	140	195	90	114	73	156	113	105	163	121
1865, 1st January	161	65	108	322	72	123	363	157	132	159	137	129
1866, 1st January	179	72	141	222	89	129	383	200	140	144	126	141
1867, 1st January	149	66	108	200	113	121	227	183	116	144	145	140
1868, 1st January	141	73	104	200	127	112	100	161	121	115	154	138
1869, 1st January	127	72	105	167	96	117	155	183	124	104	143	127
1870, 1st January	134	83	102	167	80	123	173	174	116	96	151	126
1871, 1st January	125	83	100	155	100	133	118	183	116	88	137	114
1872, 1st January	145	83	100	189	104	134	141	169	115	133	159	122
1873, 1st January	171	74	100	195	104	144	132	169	118	157	169	118
1874, 1st January	233	68	108	183	116	146	121	149	118	140	123	110
1875, 1st January	173	68	100	256	80	137	111	115	95	145	163	114
1st July	179	63	100	256	81	157	109	96	97	134	150	111
1876, 1st January	183	67	100	256	84	153	107	87	105	133	130	116
1st July	164	59	100	233	88	145	93	104	114	102	137	107
1877, 1st January	178	88	116	211	97	138	94	187	99	141	173	114
1st July	180	85	116	200	114	145	94	148	99	123	147	114
1878, 1st January	183	85	111	189	98	135	93	143	92	122	167	110
1879, 1st January	165	85	105	155	77	125	75	110	70	102	160	90

Dates.	28–29. Timber.	30. Tallow.	31. Leather.	34. Copper.	35–36. Iron.	37. Lead.	39. Tin.	42. Cotton wool, Pernambuco only.	43. Cotton yarn.	44–45. Cotton cloth.	Total Index No.	Total note circulation. Great Britain.
1845–'50, Average 6 years	100	100	100	100	100	100	100	100	100	100	2, 200	100
1857, 1st July	103	147	150	133	121	143	166	97	126	133	2, 996	101
1858, 1st January	100	118	130	121	110	131	127	86	123	99	2, 612	98
1865, 1st January	97	93	131	101	95	115	115	325	323	252	3, 575	102
1866, 1st January	91	112	131	122	100	123	122	267	308	222	3, 504	105
1867, 1st January	95	106	128	98	88	114	99	191	215	178	3, 024	108
1868, 1st January	94	98	136	96	86	111	112	181	118	114	2, 682	112
1869, 1st January	97	111	136	89	85	109	129	139	149	131	2, 666	108
1870, 1st January	99	105	128	83	88	109	138	144	154	135	2, 689	110
1871, 1st January	115	102	128	81	87	103	160	106	138	118	2, 590	111
1872, 1st January	116	111	133	108	99	109	177	119	149	125	2, 835	118
1873, 1st January	127	98	144	105	141	124	171	126	154	126	2, 947	119
1874, 1st January	125	63	147	104	167	139	143	106	136	110	2, 891	122
1875, 1st January	132	108	153	105	138	137	118	95	122	116	2, 778	123
1st July	125	93	150	100	126	126	106	96	121	116	2, 692	130
1876, 1st January	128	120	147	100	125	131	99	106	123	111	2, 711	130
1st July	128	107	140	94	111	121	94	80	113	97	2, 531	130
1877, 1st January	128	102	144	93	104	126	95	82	108	113	2, 715	130
1st July	132	99	150	85	94	118	87	82	105	108	2, 625	130
1878, 1st January	132	89	150	81	91	109	85	82	104	101	2, 554	123
1879, 1st January	110	80	150	73	80	88	82	75	82	88	2, 227	.....

III.—*Tables of Prices from paper by Mr. Ellis, on the "Money Value of Food and Raw Materials," published in "Statist" of 8th June, 1878.*

[Prices computed from the quantities and values of the articles imported as stated in the Board of Trade returns.]

A.—Average Prices of Selected Articles for Various Years.

	1859.	1869.	1873.	1876.	First quarter of 1878.
1. FOOD, &c.					
	£	£	£	£	£
Animals, oxen ..... per head.	13. 70	17. 40	16. 80	21. 03	20. 0
" sheep ..... do..	1. 78	1. 72	2. 14	2. 14	2. 30
Butter ..... per cwt.	4. 90	5. 30	5. 42	5. 85	5. 75
Cheese ..... do..	2. 56	3. 15	3. 0	2. 77	3. 50
Coffee ..... per lb.	0. 031	0. 028	0. 040	0. 043	0. 042
Wheat ..... per cwt.	0. 460	0. 520	0. 650	0. 521	0. 612
Barley ..... do..	0. 368	0. 420	0. 434	0. 308	0. 452
Maize ..... do..	0. 334	0. 335	0. 343	0. 318	0. 335
Flour ..... do..	0. 720	0. 70	0. 940	0. 80	0. 910
Spirits of all kinds ..... per gall.	0. 188	0. 184	0. 226	0. 188	0. 185
Sugar, raw ..... per cwt.	1. 30	1. 23	1. 20	1. 05	1. 12
Tea ..... per lb.	0. 077	0. 074	0. 070	0. 070	0. 065
Tobacco ..... do..	0. 032	0. 035	0. 032	0. 035	0. 033
Wine ..... per gall.	0. 340	0. 306	0. 380	0. 350	0. 356
2. MATERIALS.					
Cotton ..... per cwt.	3. 16	5. 21	4. 02	3. 02	2. 89
Dyes, Indigo ..... do...	30. 50	36. 90	28. 0	24. 20	24. 25
Flax ..... do...	2. 76	2. 83	2. 50	2. 52	2. 95
Hides, dry ..... do...	3. 72	3. 49	4. 14	4. 32	3. 18
Coal* ..... per ton.	0. 466	0. 483	1. 05	0. 547	0. 487
Copper, unfinished ..... per cwt.	5. 37	3. 50	4. 38	4. 0	3. 55
Iron, raw* ..... per ton.	2. 86	2. 90	6. 23	3. 13	2. 69
Silk ..... per lb.	1. 02	1. 22	1. 05	0. 96	0. 90
Tallow ..... per cwt.	2. 75	2. 27	2. 05	2. 14	2. 0
Wood, sawn or split ..... per load.	2. 85	2. 55	3. 08	2. 78	2. 75
Wool ..... per lb.	0. 074	0. 057	0. 061	0. 065	0. 050

*Export prices of these articles.

B.—*Aggregate Prices of Chief Articles Imported and Produced.*

[Allowance being made for their relative importance, so that the purchasing power of money can be arrived at in the various periods.]

The year 1869 *is taken as the standard, and the comparative value of a given sum then and at other periods is calculated from the above list of prices.*

Articles imported or produced.	Index number showing the comparative importance of each article in relation to the total, *i. e.*, 100.	Relative cost in—				
		1859.	1869, standard.	1873.	1876.	1878, first quarter.
Animals, oxen	8	6.300	8.000	7.700	9.670	9.115
" sheep	6	6.200	6.000	7.470	7.460	8.020
Butter	2	1.850	2.000	2.050	2.200	2.170
Cheese	1	.810	1.000	.950	.880	1.110
Coffee	1	1.110	1.000	1.430	1.540	1.500
Wheat	15	13.270	15.000	18.750	15.030	17.655
Barley	3	2.630	3.000	3.100	2.200	3.230
Maize	2	1.990	2.000	2.050	1.900	2.000
Flour	4	4.110	4.000	5.370	4.570	5.200
Spirits	1	1.020	1.000	1.230	1.020	1.005
Sugar	4	4.230	4.000	3.900	3.410	3.640
Tea	3	3.120	3.000	2.840	2.840	2.635
Tobacco	1	.910	1.000	.910	1.000	.945
Wine	2	2.230	2.000	2.480	2.290	2.325
Cotton	19	11.520	19.000	14.660	11.010	10.540
Indigo	1	.820	1.000	.760	.650	.655
Flax	3	2.930	3.000	2.650	2.660	3.130
Hides	1	1.070	1.000	1.190	1.240	.910
Coal	8	7.720	8.000	17.430	9.060	8.065
Copper	1	1.530	1.000	1.250	1.140	1.010
Iron, raw	2	1.980	2.000	4.300	2.160	1.855
Silk	2	1.670	2.000	1.720	1.570	1.475
Tallow	1	1.220	1.000	.900	.940	.880
Wood	2	2.240	2.000	2.480	2.190	2.160
Wool	7	9.090	7.000	7.490	7.980	7.245
	100	91.570	100.000	115.060	96.610	98.475

TABLE IV.—*Estimated Production of Gold throughout the World from* 1852 *to* 1875, *showing the total for each Quinquennial Period, and the Average Annual Amount in such Period. Compiled from paper handed in to the Committee on Depreciation of Silver by Sir Hector Hay. No.* 338 *of session* 1876, *Appendix, p.* 25.

[In thousands of pounds, 000's omitted.]

Years.	Total production of gold.	Average annual production in quinquennial period.
1852	£36, 550,	
1853	31, 090,	
1854	25, 490,	£29, 933,
1855	27, 015,	
1856	29, 520,	
Total in 5 years	149, 665,	
1857	26, 655,	
1858	24, 930,	
1859	24, 970,	24, 633,
1860	23, 850,	
1861	22, 760,	
Total in 5 years	123, 165,	
1862	21, 550,	
1863	21, 390,	
1864	22, 600,	22, 760,
1865	24, 040,	
1866	24, 220,	
Total in 5 years	113, 800,	
1867	22, 805,	
1868	21, 945,	
1869	21, 245,	21, 753,
1870	21, 370,	
1871	21, 400,	
Total in 5 years	108, 765,	
1872	19, 910,	
1873	19, 240,	
1874	18, 150,	*19, 200,
1875	19, 500,	
Total in 4 years	76, 800,	

*Average of four years only.

TABLE V.—*Statement of the Quantity and Value of the Exports of the undermentioned Articles in* 1873, *with the Average Prices at which they were Exported; of the Quantity of the same Articles Exported in* 1877, *and the Values they would Exhibit at the Average Prices of* 1873, *and of the Actual Values Declared in* 1877.

[From report to the Board of Trade on the Prices of Exports of British and Irish produce in 1861–'77.]
[000's omitted in columns of quantities.]

Articles.	Quantities of articles exported in—		Average prices of articles in 1873, deduced from the declared quantities and values.	Declared values of articles exported in 1873.	Computed values of articles exported in 1877 at the prices of 1873.	Declared values of articles exported in 1877.
	1873.	1877.		£	£	£
Alkali ..... cwts.	4,754,	5,686,	12. 32*s.*	2,929,006	3,502,572	2,197,161
Animals, horses ..... No.	3,	2,	62. 95*l.*	177,262	142,141	168,070
Arms and ammunition:						
Fire-arms, small .. .. No.	354,	251,	29. 13*s.*	515,260	365,024	263,793
Gunpowder ..... lbs.	16,627,	16,155,	6. 38*d.*	442,170	429,452	394,577
Bags, empty ..... doz.	4,430,	4,921,	8. 64*s.*	1,913,153	2,125,936	1,518,611
Beer and ale ..... brls.	585,	461,	82. 81*s.*	2,422,020	1,909,017	1,901,399
Books, printed ..... cwts.	84,	84,	10. 88*l.*	913,846	918,250	897,742
Butter ..... do..	45,	37,	118. 14*s.*	265,585	220,833	247,033
Candles, of all sorts ..... lbs.	6,593,	6,085,	*8. 04*s.*	220,776	203,863	195,916
Carriages, railway ..... No.	3,	2,	111. 68*l.*	366,096	268,479	202,805
Cement ..... cwts.	4,348,	4,492,	3. 04*s.*	660,444	682,799	579,763
Cheese ..... do..	19,	17,	86. 30*s.*	81,063	72,298	69,698
Coals, cinders, and fuel ..... tons.	12,618,	15,420,	20. 90*s.*	13,188,511	16,113,952	7,844,486
Cordage and twine ..... cwts.	120,	106,	59. 70*s.*	359,643	317,120	294,758
Corn:						
Wheat ..... do..	1,128,	208,	13. 47*s.*	759,605	140,041	135,132
Wheat, flour ..... do..	46,	29,	18. 97*s.*	43,828	27,508	25,268
Cotton yarn ..... lbs.	214,779,	227,651,	17. 76*d.*	15,895,440	16,846,204	12,192,954
Cotton manufactures:						
Piece goods, white or plain, yds	2,384,174,	2,699,282,	3. 45*d.*	34,283,471	38,802,180	31,809,747
Piece goods, printed, checked, or dyed ..... yds	1,083,306,	1,125,255,	4. 78*d.*	21,580,770	22,411,333	20,218,715
Of mixed materials ..... do..	16,255,	13,284,	9. 29*d.*	628,941	514,184	413,987
Fish, herrings ..... brls	724,	650,	28. 38*s.*	1,026,978	921,992	1,056,069
Glass:						
Plate ..... sq. ft	2,183,	1,157,	3. 01*s.*	328,699	174,138	128,663
Flint ..... cwts	124,	96,	57. 88*s.*	359,265	278,316	268,229
Common bottles ..... do..	908,	613,	10. 18*s.*	461,918	311,886	336,754
Of other sorts ..... do..	117,	84,	33. 0*s.*	192,752	138,044	120,823
Hats of all sorts ..... doz.	598,	889,	29. 46*s.*	880,787	1,308,815	1,106,556
Leather:						
Tanned, unwrought ..... cwts.	116,	144,	9. 00*l.*	1,048,909	1,299,879	1,165,134
Wrought, boots and shoes, doz. prs	528,	436,	64. 73*s.*	1,707,886	1,411,651	1,336,478
Of other sorts ..... lbs.	1,655,	1,481,	3. 68*s.*	304,898	272,545	305,175
Linen and jute yarn:						
Linen yarn ..... lbs.	28,734,	19,216,	16. 51*d.*	1,976,830	1,321,901	1,291,729
Jute yarn ..... do..	12,264,	14,998,	4. 04*d.*	206,521	252,461	217,424
Linen and jute manufactures:						
Linen manufactures—						
White or plain ..... yds	195,404,	159,275,	7. 62*d.*	6,204,800	5,056,970	4,597,665
Printed, checked, or dyed do..	8,198,	14,411,	7. 63*d.*	260,639	458,155	471,982
Sail-cloth and sails ..... do..	4,522,	4,081,	*13. 97*d.*	263,276	237,532	233,180
Jute manufactures ..... do..	95,935,	116,753,	3. 98*d.*	1,590,850	1,936,154	1,547,408
Metals:						
Iron—						
Old, for remanufacture .. tons	60,	23,	6. 62*l.*	399,522	154,968	100,788
Pig and puddled ..... do..	1,142,	882,	124. 65*s.*	7,118,037	5,497,433	2,528,655
Bar, angle, bolt, and rod .. do..	287,	248,	13. 09*l.*	3,755,980	3,246,189	1,928,103
Railroad, of all sorts ..... do..	785,	498,	13. 27*l.*	10,418,852	6,611,857	3,868,106
Wire ..... do..	29,	51,	23. 52*l.*	692,470	1,201,684	752,278
Sheets, boiler, and armour plates ..... tons.	115,	89,	17. 95*l.*	2,056,932	1,601,014	1,140,417
Galvanised ..... do..	32,	54,	26. 95*l.*	867,271	1,467,832	1,109,374
Hoops ..... do..	55,	56,	14. 58*l.*	798,686	823,172	482,592
Tinned plates ..... do..	121,	153,	32. 77*l.*	3,953,042	5,021,216	3,033,126
Cast or wrought, &c ..... do..	282,	255,	19. 43*l.*	5,478,759	4,947,033	3,645,661
Steel, unwrought ..... do..	39,	24,	37. 11*l.*	1,462,857	901,476	807,850
Manufactures of steel .... do...	10,	11,	69. 55*l.*	728,831	787,376	717,035

* Per dozen lbs.

TABLE V—Continued.

Articles.	Quantities of articles exported in—		Average prices of articles in 1873, deduced from the declared quantities and values.	Declared values of articles exported in 1873.	Computed values of articles exported in 1877 at the prices of 1873.	Declared values of articles exported in 1877.
	1873.	1877.				
Metals—Continued.						
Copper—				£	£	£
Unwrought, ingots, cakes, or slabs.....cwts	259,	232,	4. 68*l.*	1, 212, 612	1, 084, 468	876, 358
Wrought or partly wrought—						
Mixed or yellow metal cwts.	231,	341,	4. 29*l.*	990, 160	1, 464, 057	1, 207, 073
Of other sorts ..... do..	209,	225,	5. 18*l.*	1, 084, 701	1, 163, 744	975, 102
Brass of all sorts.....do..	84,	92,	5. 99*l.*	500, 720	550, 128	440, 620
Lead: Pig, sheet, and pipe..tons.	32,	42,	23. 75*l.*	760, 294	1, 008, 591	912, 498
Tin, unwrought.....cwts	115,	122,	6. 83*l.*	786, 156	833, 158	448, 864
Zinc, wrought and unwro't..do..	60,	116,	24. 92*s.*	85, 746	144, 237	119, 793
Oil, seed .....galls	11, 157,	16, 549,	2. 64*s.*	1, 471, 071	2, 184, 426	1, 971, 912
Paper other than hangings..cwts	320,	321,	3. 04*l.*	973, 617	976, 311	901, 934
Salt .....tons.	841,	834,	18. 77*s.*	789, 054	782, 428	462, 575
Silk manufactures—broad piece goods .....yds	2, 984,	4, 356,	3. 54*s.*	528, 266	771, 029	701, 408
Soap .....cwts.	184,	299,	26. 45*s.*	243, 047	395, 452	365, 594
Spirits, British.....galls.	1, 686,	1, 530,	2. 50*s.*	210, 964	191, 256	374, 204
Sugar, refined .....cwts.	697,	1, 119,	30. 02*s.*	1, 045, 751	1, 679, 681	1, 542, 160
Wool, sheep and lambs' .....lbs.	7, 035,	9, 549,	21. 18*d.*	620, 848	842, 699	705, 610
Woolen and worsted yarn .....lbs.	34, 745,	26, 973,	37. 26*d.*	5, 393, 493	4, 187, 486	3, 609, 456
Woolen and worsted manufact's:						
Cloths, coatings, &c., unmixed and mixed..... yds	38, 634,	44, 125,	41. 00*d.*	6, 599, 635	7, 538, 056	6, 567, 806
Flannels, blankets, &c ....do..	14, 447,	16, 059,	18. 10*d.*	1, 089, 864	1, 211, 086	1, 176, 377
Worsted stuffs, mixed and unmixed .....yds	282, 885,	194, 777,	12. 11*d.*	14, 277, 382	9, 828, 125	7, 725, 414
Carpets and druggets.....do..	9, 921,	6, 454,	38. 64*d.*	1, 597, 383	1, 039, 166	847, 763
Total.....	.....	.....	.....	192, 453, 901	191, 530, 459	147, 891, 320

EXTRACT FROM RETURN EAST INDIA (SILVER.)

22d March, 1877, pp. 17–20.

Applications made to the Government of India for measures in remedy of the effects of the fall in the Gold price of Silver, and the action taken thereon.

"On the 17th July, 1876, the secretary to the Bengal Chamber of Commerce transmitted for the consideration of his Excellency the Governor-General in Council, the following two Resolutions adopted at a special general meeting of the chamber held on Saturday the 15th July:

RESOLUTIONS.

1st. "That the continued depreciation in the value of Silver is a question most seriously affecting the political and financial interests of the country, and that, in view to its very great importance, the committee be requested to address the Government, in order to obtain such information as they may be able to give in regard to the policy which they propose to pursue under the circumstances.

2d. "That the Chamber approves of the suggestion of the committee that it is expedient, in view of any ultimate measures that the Government may adopt, that clause 19 of act XXIII of 1870, making it obligatory on the mints in India to receive all Silver tendered for Coinage, and also section 11, clause 6, of act III of 1871, making it obligatory on the currency department to issue notes against Silver bullion sent in, be temporarily suspended, at the discretion of Government; and that during such suspension, or till further notice, it be not lawful to import coined rupees from any foreign ports."

On the 22d of July the secretary to the same chamber forwarded, for the consideration of the governor-general in council, copy of the proceedings of the chamber at the special general meeting aforesaid.

In this letter the committee of the chamber, while recognizing the difficulty of the position of the Government of India, remarked that the uncertainty that had hitherto shrouded the action of government had been attended with serious consequences to merchants and bankers, and would so continue to attend their transactions so long as they were kept in ignorance of the course of action the government proposed to take. The committee, therefore, expressed a hope that his Excellency the Viceroy would, in the interests of commerce and of the country generally, accede to the prayer of the first resolution of the meeting, and make public the intentions of the government.

As to the second resolution, the committee pointed out that its object was not to prohibit Coinage altogether (for that would be likely to bring about a collapse of credit), but to place all Coinage in the hands of the government, to be exercised at their discretion. It appeared to the committee suicidal for the secretary of state to all the competition of bar-silver with rupees which he has to offer to those requiring Money in India, and that to suspend the free conversion of Silver bullion into legal-tender Coin was not only wise and reasonable, but a necessary precaution for the Government of India to take for the preservation of their own currency, and to support the credit of their own loans, as well as to prevent the country from being swamped by Silver sent in by foreign nations.

The committee argued that the fact that the Government of India was compelled "to put their mint stamp to all Silver" sent to India "had given an artificial and fictitious value to Silver," which would cease as soon as the law was suspended. "Bar-silver would then gradually fall to its own intrinsic value, and the extent to which it was depreciated would be soon gauged, whereas, as things were, it was impossible to say how much its value was appreciated by our 'open Coinage system.'"

When all Europe was closing its doors against the import of Silver, with the avowed object of having as little of the metal as possible, should the depreciation be found permanent, it seemed most impolitic, the committee thought, "to keep ours wide open for the reception of an unlimited quantity, costing the country through our coinage laws far more than its real intrinsic value." The committee could see no valid reason against the immediate adoption by the government of the second resolution of the meeting, and considered that the objections brought against it were based either on a misconception of its real scope, or on abstract principles (ignored by other States); whereas the position of affairs was altogether exceptional, and ordinary rules did not apply. The committee represented that the measures recommended in the resolution were not more stringent than (in fact scarcely so stringent as) the first financiers in Europe had found it necessary to adopt.

Lastly, the committee pointed out that there was a third proposition put before the meeting, recommending the adoption of a Gold Standard, which, in deference to the feeling apparent among members present,

was temporarily withdrawn; and they referred the government to the debate at the meeting upon this proposal.

On the 31st July the Government of India published a resolution inviting attention to the immediately probable financial consequences of the fall in the Gold value of Silver, and insisting upon the necessity for the utmost economy of the public resources.

On the 1st August the secretary to the Calcutta Trades Association forwarded a memorial from the master wardens and committee of the association to his Excellency the Viceroy and Governor-General of India in council.

In this document the memorialists represented that they had for many months past been suffering great loss from the low rate of exchange, which bid fair to paralyze trade. The memorialists joined earnestly with the Bengal Chamber of Commerce in urging on the government the importance of declaring the policy it intended to pursue for the remedy of this evil, and prayed that the policy of a temporary suspension of the compulsory Coinage of Silver might receive the early consideration of government.

The memorialists further expressed great satisfaction at the desire manifested by the government to encourage local manufactures, and suggested a relaxation of the rules against the purchase of imported stores for the government in India.

On the 22d September, 1876, after considering the "Report by the Select Committee of the House of Commons on Depreciation of Silver, with the proceedings of the committee ordered by the House of Commons to be printed on the 5th July, 1876," the Government of India published a resolution (No. 3044) upon the suggestions of the Bengal Chamber of Commerce and the Calcutta Trades Association, in which the following arguments and conclusions were stated:

1. The recent change in the value of Silver, measured in Gold, may be due to changes in the value of one metal or the other, or of both. Before a fit remedy can be applied, it is essential to ascertain what exactly has happened, whether Gold has risen or Silver fallen, and how much the value of each metal has changed. It cannot be assumed, without decisive proof, that the divergence of the two metals is due wholly, or even chiefly, to the fall in the value of Silver.

2. The prices of commodities and of the precious metals in London and in India witness to a considerable rise in the value of Gold since March, 1873, and especially since December, 1875, and do not show any fall in the value of Silver measured in commodities other than Gold. Using these prices with all reserve, it must still be said that they afford evidence of this fact at least that a rise in the value of Gold is one of the causes which has disturbed the equilibrium of the two metals.

3. The divergence of the value of the two metals seems due to three principal causes, of which the first appears to be the most efficient:

(1) The substitution of Gold as the Standard of value, in Germany,

the Netherlands, and the Scandinavian Kingdoms, for Silver, and in the countries of the Latin Convention for their customary alternative or compensatory Standard of Silver and Gold.

(2) The increased production of Silver in the United States of America.

(3) The decreased demand for Silver in India.

4. The value of Gold and Silver, like that of any other commodity, depends on the one hand upon their supply, on the other upon the demand for them, which again depends upon the uses made of them. The long continued equilibrium between the value of Gold and that of Silver is due to the two metals having shared, without material change of conditions, the only great field for the employment of either of them, *i. e.*, the supply of legal-tender Metallic Money. This equilibrium has been disturbed by the rapid supersession of Silver by Gold in Europe and America as the Standard of value, and therefore as the material of legal-tender metallic Money. This supersession is calculated *a priori* to raise the value of Gold no less than to lower the value of Silver.

5. Excessive importance is not *per se* attached to the increased production of Silver in the United States of America.

6. When India is in a normal condition, *i. e.*, when there is no abnormal demand for any of her staples, and she is not borrowing large sums from abroad, the amount of treasure required to settle her accounts with the world is not considerable, and of the treasure received a substantial proportion has always been Gold. The large imports of treasure into India since 1850 are due to abnormal circumstances, as follows:

(1) The Crimean war transferred to India large demands for produce theretofore obtained from Russia.

(2) The American civil war exaggerated temporarily the value of Indian cotton.

(3) Great sums of money have been borrowed for:

(*a*) The suppression of the mutiny;

(*b*) The construction of railroads (guaranteed and State) and canals.

(*c*) The Bengal famine.

It would be altogether misleading to treat the great imports of treasure in the last twenty-five years as normal, or to expect that they will or can continue. There is, therefore, no reason to expect that Silver will be poured into India, although, of course, if it falls in value, a greater weight of it must come to represent the same value.

7. To suspend the free Coinage of legal-tender metallic Money, as advocated by the Bengal Chamber of Commerce, would give a monopoly value to the existing stock of rupees, and so reduce prices; whereas prices are not yet risen.

8. The value of no substance can serve as a standard measure of value, unless its use as the material of legal-tender currency is freely admitted. If, therefore, the free coinage of Silver on fixed conditions were disallowed in India, Silver would no longer be the standard of value of

India, but another standard would be substituted, viz, the monopoly value of the existing stock of rupees, tempered by any additions made to it by the government, or illicitly. If no such additions were made, the value of the rupee would gradually but surely rise, owing to the supply being cut off.

9. The stamp of a properly regulated mint, such as the Indian Mints, adds nothing, except the cost of manufacture and seigniorage, to the value of the metal on which it is impressed, but only certifies to its weight and purity.

10. A sound system of currency must be automatic or self-regulating. No civilized government can undertake to determine from time to time by how much the legal-tender currency should be increased or decreased, nor would it be justified in leaving the community without a fixed metallic standard of value even for a short time. It is a mistake to suppose that any European nation has rejected Silver as a standard of value without substituting Gold.

11. For all these reasons the Government of India rejected as inadmissible the proposal that the mints should be closed to the free coinage of Silver for the public on fixed conditions, without at the same time opening them to the free coinage of Gold as legal-tender money on fixed conditions.

12. The Government of India further concluded that there was nothing as yet demanding recourse to a measure so costly, and of which all the conditions were so uncertain, as the adoption of a Gold standard. Thus the conclusions stated in the resolutions were:

1st. That the divergence of the values of Gold and Silver is not necessarily attributed only to a diminution in the value of Silver; that there are strong reasons for believing that Gold may have increased, as well as that Silver has decreased in value, and that this consideration must have an important bearing on the action of government in reference to the present disorder.

2d. That although it is most desirable in the interests of trade that the standard of value in India should be the same as the standard of value in the chief countries with which India interchanges commodities, yet trade will not be permanently injured by a fall in the value of the rupee measured in Gold, provided only that a fresh stable equilibrium of the precious metals be attained.

3d. That up to the present moment there is no sufficient ground for interfering with the standard of value.

The only other representations received upon the subject by the Government of India, have been complaints by various European officers in its service of the loss which they are suffering from the fall of the sterling value of the rupee, and prayers for assistance from the State.

These memorials are still under consideration, either by the Government of India or the Secretary of State.

FINANCIAL DEPARTMENT,

Calcutta, 9th February, 1877.

THE UNITED STATES.

RESOLUTIONS, LETTERS, AND REPORTS CONCERNING METALLIC MONEY IN THE CONTINENTAL CONGRESS.

EXTRACTS FROM THE JOURNAL OF THE CONTINENTAL CONGRESS, PHILADELPHIA, MAY 11, 1775.

* * * * * * *

Mr. HANCOCK laid before the Congress a letter from the Provincial Congress of Massachusetts-Bay, etc.

[In the letter Joseph Warren, the President of that Provincial Congress, says:]

We also inclose several resolves for empowering and directing our receiver-general to borrow the sum of one hundred thousand pounds, lawful money, and to issue his notes for the same; it being the only measures which we could have recourse to, for supporting our forces; and we request your assistance in rendering our measures effectual, by giving our notes a currency through the continent.

[The bills so issued were promises to pay, with interest, to ———, or order, the 1st day of June, 1777, the aforesaid sum of ———, lawful money, in Spanish milled dollars, at six shillings each, or in the several species of coined Silver and Gold enumerated in an act made and passed in the 23d year of his late Majesty King George the Second, intituled "An act for ascertaining the rates at which coined Silver and Gold and English half-pence and farthings may pass within this government," etc.*

[*The statute here referred to is as follows:

Acts and laws of his Majesty's province of the Massachusetts-Bay, in New-England.

Anno regni Regis Georgii II. Vicesimo-tertio.

CHAP. V.

AN ACT for ascertaining the Rates at which coined Silver and Gold and English Half-Pence and Farthings may pass within this Government.

Whereas in and by an Act made and passed in the twenty-second Year of his present Majesty's Reign, Intituled, An Act for drawing in the Bills of Credit of the several

THURSDAY, *June* 22, 1775.

The Congress then came to the following resolutions:

* * * * * * *

Resolved, That a sum not exceeding two millions of Spanish milled dollars be emitted by the Congress in bills of credit, for the defence of America.

Resolved, That the twelve confederated colonies be pledged for the redemption of the bills of credit, now directed to be emitted.

FRIDAY, *June* 23, 1775.

Agreeable to order, the Congress resolved itself into a Committee of the Whole, to take into further consideration the state of America, and, after some time spent therein, the president resumed the chair, and Mr. Ward reported certain resolutions come into by them, and that not having yet finished, they desired leave to sit again.

The report of the committee being read, was agreed to as follows:

Resolved, That the number and denomination of the bills to be emitted be as follows:

[49,000 each of bills of 8, 7, 6, 5, 4, 3, 2, and 1; and 11,800 bills of 20 dollars; in all, 2,000,000.]

Resolved, That the form of the bills be as follows:

No.—.] CONTINENTAL CURRENCY. [——— Dollars.

This bill entitles the bearer to receive ——— Spanish milled dollars, or the value thereof in Gold or Silver, according to the resolutions of the Congress, held at Philadelphia, on the 10th day of May, A. D. 1775.

Denominations which have at any Time been issued by this Government and are still outstanding, and for ascertaining the Rate of coin'd Silver in this Province for the future; *it is enacted in the Words following*, viz. "That all Bargains, and Contracts, Debts and Dues whatsoever which shall be agreed, contracted or made after the thirty first Day of *March* 1750, shall be understood, and are hereby declared to be in Silver at *six Shillings and eight Pence* per Ounce, and all Spanish mill'd Pieces of Eight of full Weight shall be accounted, taken and paid at the Rate of *six Shillings* per Piece for the discharge of any Contracts or Bargains to be made after the said thirty first Day of *March* 1750, the Halves, Quarters and other less Pieces of the same Coin to be accounted, received, taken or paid in the same Proportion."

And whereas there is great Reason to apprehend that many and great Inconveniences may arise in Case any coin'd Silver or Gold, or English Half Pence and Farthings should pass at any higher Rate than in a just Proportion to Spanish Pieces of Eight or coin'd Silver at the Rates aforesaid:

Be it therefore enacted by the Lieutenant Governor, Council and House of Representatives, That it shall not be lawful for any Person within this Government from and after the thirty-first Day of *March* One Thousand seven Hundred and fifty, to receive take or pay any of the following Coin at any greater or higher Rate than is allowed by this Act, *viz.* A Guinea at *twenty-eight Shillings:* An English Crown at *six Shillings and eight Pence:* An half Crown at *three Shillings and four Pence:* An English Shilling at *one Shilling and four Pence:* An English six Pence at *eight Pence:* A double Johannes, or Gold Coin of *Portugal* of the Value of *three Pounds twelve Shillings* Sterling, at *four Pounds sixteen Shillings:* A single Johannes of the Value of *thirty-six Shil-*

Resolved, That Mr. J. Adams, Mr. J. Rutledge, Mr. Duane, doctor Franklin, and Mr. Wilson, be a committee to get proper plates engraved, to provide paper, and to agree with printers to print the above bills.

FRIDAY, *April* 19, 1776.

Resolved, That a committee of seven be appointed to examine and ascertain the value of the several species of Gold and Silver Coins, current in these colonies, and the proportions they ought to bear to Spanish milled dollars:

The members chosen, Mr. Duane, Mr. Wythe, Mr. J. Adams, Mr. Sherman, Mr. Hewes, Mr. Johnson, and Mr. Whipple.

MONDAY, *September* 2, 1776.

The committee to whom was recommitted the report for ascertaining the value of the several species of Gold and Silver Coins current in these States, and the proportion they and each of them ought to bear to Spanish milled dollars, brought in their report which was read.

Ordered, To lie on the table.

---

lings Sterling, at *forty-eight Shillings:* A Moidore at *thirty-six Shillings:* A Pistole of full Weight at *twenty two Shillings:* Three English Farthings for *one Penny;* and English Half Pence in greater or less Numbers in Proportion.

And be it further enacted, That if any Person within this Government shall after the thirty-first Day of *March* One Thousand seven Hundred and fifty, for the discharge of any Contract or Bargain, account, receive, take or pay any of the several Species of Coins before mentioned at any greater or higher Rate than at which the same is hereby regulated, settled and allowed to be accounted, received, taken or paid, every Person so accounting, receiving, taking or paying the same contrary to the Directions herein contained, shall forfeit the Sum of *fifty Pounds* for every such Offence, one Moiety thereof to his Majesty for the Use of this Government, the other Moiety to such Person or Persons as shall sue for the same; to be recovered with full Costs of Suit by Action of Debt, Bill, Plaint or Information in any of his Majesty's Courts within this Province.

Provided always, and it is hereby declared, That nothing in this Act shall be understood to restrain any Person or Persons from accounting, receiving taking or paying any of the abovementioned Species or Coins in discharge of any Debts, Contracts or Bargains made before the thirty-first Day of *March* One Thousand seven Hundred and fifty, at the following Rates, *viz.* For any Debt contracted before the said thirty-first Day of *March*, and understood to be payable in Bills of the old Tenor in such Proportion higher or greater than the Rates set at in this Act, as *forty five Shillings* is to *six Shillings;* and for any Debt contracted before the said thirty-first day of *March*, and understood to be payable in Bills of the middle Tenor or Bills of the new Tenor, in such Proportion higher or greater than the Rates set at in this Act as *eleven Shillings and three Pence* is to *six Shillings:* Any Thing in this Act to the contrary notwithstanding.]

REPORT OF A COMMITTEE APPOINTED APRIL 19, 1776, TO ASCERTAIN THE RELATIVE VALUE OF CURRENT SPECIE, AND ITS RELATION TO THE SPANISH MILLED DOLLAR, ETC.

[From MS. Reports of Committee on Finance, vol. 26.]

The committee appointed on the 19th April to ascertain the value of the several species of Gold and Silver current in these Colonies, and the proportion they and each of them bear and ought to bear to Spanish milled dollars, have taken the same into consideration and thereupon came to the following resolutions:

Whereas the holders of bills of credit emitted by authority of Congress will be entitled, at certain periods appointed for redemption thereof, to receive out of the treasury of the United Colonies the amount of the said bills in Spanish milled dollars, or the value thereof in Gold or Silver, and the value of such dollars, compared with other Silver and with Gold Coins, is estimated by different standards in different Colonies, whereby injustice may happen in some instances to the public, as well as to individuals, which ought to be remedied.

And whereas the credit of the said bills as current money ought to be supported by the inhabitants of these Colonies, for whose benefit they were issued at the full value therein expressed, and who stand bound to redeem the same, according to the like value and the pernicious artifices of the enemies of American liberty to impair the credit of the said bills by raising the nominal value of Gold and Silver ought to be guarded against and prevented: Therefore,

Resolved, That the several Gold and Silver Coins passing in the said Colonies shall be received into the public treasury of the Continent, and

paid out in exchange for bills emitted by authority of Congress, when the same shall become due, at the rates set down in the following table:

	Weight.		Value.
	Dwt.	*grains.*	*Dollars.*
English guinea	5	6	4⅓
French guinea	5	5	4⅔
Johannes	18	0	16
Half johannes	9	0	8
Spanish pistole	4	8	3⅓
French pistole	4	4	3⅓
Doubloon			
Moidore	6	18	6
English crown			1⅓
French crown			1⅓
English shilling			⅓
Spanish milled dollar			*1

* Continental money.

NOTE.—The Gold coins here mentioned which were actually in circulation were in all probability worn below full weight, while it seems quite certain that the Silver coins, notably the English coins, were in a particularly bad condition in this respect. Hence from the above table it is difficult to decide what ratio was established by this the first legislation on the subject by the United States. The relation here indicated between English guineas and English crowns, *supposing them to be of full weight,* is nearly the English legal ratio of 15.21.

The rate given further on for bullion is very near this ratio, but the fineness of the Silver not being given, it is impossible to know with certainty; if the fineness be that of the Spanish dollar then lately coined, $11\frac{1}{2}$, it was a little above. If it is that of English standard Silver, $\frac{37}{40}$, it was a little below 15.21 to 1.—H.

Resolved, That a deduction at the rate of one twenty ninth part of a dollar p. grain shall be made on all Gold Coins falling short of the weight specified in the aforesaid table, and an advance at the same rate shall be allowed on such as exceed the aforesaid weight.

Resolved, That all parts of the several Gold Coins before enumerated shall be rated in just proportion according to the foregoing table, and that Gold in Bullion shall be at the rate of seventeen dollars per ounce Troy weight. Sterling Alloy and Silver at one dollar and one ninth of a dollar per ounce.

Resolved, That all bills of credit emitted by authority of Congress ought to pass current in all payments, trade and dealings in these Colonies, and be deemed equal in value to Gold and Silver, according to the rates set down in the foregoing table; and that whosoever shall offer, demand, or receive more in the said bills for any Gold or Silver coins, or bullion, than at the rates aforesaid, or more of the said bills for any lands houses goods wares or merchandise than the nominal sums at which the same might be purchased of the same person with Gold or Silver, every such person ought to be deemed an enemy to the liberties of these Colonies, and treated accordingly, being duly convicted thereof before the committee of inspection of the city, county or district or in case of an appeal from their decision, before the assembly convention council or committee of safety or before such other persons or courts as have or shall be authorized by the general assemblies or conventions of the Colonies respectively to hear and determine such offenses.

FROM THE JOURNAL OF CONGRESS.

FRIDAY, *December* 19, 1777.

Congress took into consideration the report of the board of war of the 12th, and thereupon, came to the following resolution:

Whereas, Sir William Howe, commander in chief of His Britannic Majesty's forces, has required that provisions should be sent in for the subsistence of the American prisoners in his possession, and for the purchase of such necessaries as they may stand in need of, and has prohibited the circulation of the Money struck by the authority of these States, within such parts of the country as are at present subjected to his power; whereby great difficulties have occurred in relieving the distresses of the American prisoners; and whereas large sums of Continental bills of credit have been counterfeited and issued by the agents, emissaries and abettors of Sir William Howe:

Resolved, That the accounts of all provisions and other necessaries which already have been, or which hereafter may be supplied by the public to prisoners in the power of these states, shall be discharged by either receiving from the British commissary of prisoners or any of his agents, provisions or other necessaries, equal in quality and kind to what have been supplied, or the amount thereof in Gold and Silver, at the rate of 4 shillings and sixpence for every dollar of the currency of these states: and that all these accounts be liquidated and discharged, previous to the release of any prisoners to whom provisions or other necessaries shall have been supplied.

THURSDAY, *August* 27, 1778.

* * * * * * *

Resolved, That a committee of five be appointed to consider the state of the money and finances of the United States, and report thereon from time to time: the members chosen, Mr. R. Morris, Mr. Gerry, Mr. R. H. Lee, Mr. Witherspoon, and Mr. G. Morris.

MONDAY, *January* 7, 1782.

* * * * * * *

On a report of a committee, consisting of Mr. Osgood, Mr. Randolph and Mr. Bee, to whom was referred a motion relative to the value and weight of foreign coins:

Resolved, That it be an instruction to the Superintendent of Finance, to prepare and report to Congress a table of rates, at which the different species of foreign coins most likely to circulate within the United States, shall be received at the Treasury thereof.

COINAGE SCHEME PROPOSED BY ROBERT MORRIS, SUPERINTENDENT OF FINANCE.

[From MS. letters and reports of the Superintendent of Finance, No. 137, Vol. I, pp. 289-300.]

OFFICE OF FINANCE,
January 15, 1782.

SIR: Finding by the act of the United States in Congress, of the seventh instant, that I am instructed to prepare and report a table of rates at which the different species of foreign coins most likely to circulate within the United States shall be received at the Treasury, I have been induced again to turn my attention to an object which has employed my thoughts very frequently, and which would have long since been submitted to Congress, had I not been prevented by other business, and much delayed by the things, relating to this business, which depended upon others. I shall now pray leave to deliver my sentiments somewhat at large on this subject.

The United States labor under many inconveniences, and even disadvantages, which may at present be remedied; but which, if suffered to continue, would become incurable, and lead to pernicious consequences. It is very fortunate for us, that the weights and measures used throughout America are the same; experience has shewn in other Countries; that the efforts of the Legislator to change Weights and Measures, altho fully seconded by the more enlightened part of the community, have been so strongly opposed by the popular habits and prejudices, that ages have elapsed without producing the desired effect. I repeat therefore that, it is happy for us to have throughout the Union, the same ideas of a mile and an inch, a Hogshead and a quart, a pound and an ounce. So far our commercial dealings are simplified, and brought down to the level of every capacity.

With respect to our money the case is very widely different. The ideas annexed to a pound, shilling, and a penny, are almost as various as the States themselves. Calculations are therefore as necessary for our inland commerce, as upon foreign exchanges; and the commonest things become intricate where money has anything to do with them. A Farmer in New Hampshire, for instance can readily form an idea of a bushel of wheat in South Carolina, weighing sixty pounds, and placed at one hundred miles from Charleston; but if he were told that in such situation it is worth twenty-one shillings and eight pence, he would be obliged to make many inquiries, and form some calculations before he could know that this sum meant, in general, what he would call four shillings; and, even then he would have to enquire what kind of coin that four shillings was paid in, before he could estimate it in his own mind according to the ideas of money which he had imbibed.

Difficulties of this sort do not occur to farmers alone, they are perplexing to most men, and troublesome to all, it is however, a fortunate circumstance, that money is so much in the power of the Sovereign, as that he can easily lead the people into new ideas of it; and even if that were not the case, yet the loose state in which our currency has been for some years past, has opened the way for receiving any impressions on that subject. As we are now shaking off the inconveniences of a depreciating medium, the present moment seems to be that, in which a general currency can best be established, so as that in a few months the same names of money will mean the same things, in the several parts of the United States.

Another inconvenience, which admits of the same easy remedy, and which could indeed be cured by the very same act, is the want of a legal tender. This is as necessary for the purposes of jurisprudence, as a general currency is for those of commerce. For although, there is great impropriety not to say injustice, in compelling a man to receive a part of his debt in discharge of the whole; yet it is both just and proper that the law should protect the honest debtor who is willing to pay, against the vexatious suits of an oppressive creditor, who refuses to receive the full value.

The nature, value and use of money have always occasioned strong temptations to the commission of Fraud; and of consequence the practice of counterfeiting is coeval with that of coining.

No Government can guard its subjects entirely against the wicked Ingenuity which has been exercised in this respect; But it has always been the object of every wise government to take all the precautions against it which are within the compass of human ability. These precautions will be most effectual where the coins are few and simple; because they, by that means, become familiar to all ranks and degrees of men; but where the coins are so numerous that the knowledge of them is a kind of science, the lower order of citizens are constantly injured by those, who carry on the business of debasing, sweating, clipping, counterfeit-

ing and the like. It is therefore to be lamented that we have so many different coins in the United States.

It is not necessary to mention what is in every bodies mouth, that the precious metals were first used as Bullion, and that the inconvenience of weighing and the difficulty of assaying, introducing the practice of coining, in order that the weight and fineness might be known at the first view, and of consequence the value be instantly ascertained. It is equally unnecessary to observe, that the great privilege of declaring this value, by particular marks, has among all nations been vested, exclusively in the sovereign. A trust so important could not indeed be vested any where else, because the danger of abusing it was too great; and history informs us, that Sovereigns themselves have not on this occasion behaved with that integrity, which was alike due to their subjects and to themselves, to the interests of the people, and to their own personal glory.

Experience has already told us, that the advantage of Gold as a coin, is in this country very considerably diminished; for every distinct piece must be weighed before it can be safely received.

Both Gold and silver coins are indeed preferable in one respect to common Bullion, that the standard is presumed to be just, and consequently they are received without the delays and expenses of assaying. It must however be remembered, that they are foreign Coins, and of course we are not only exposed to the tricks of individuals but should it suit the Interest or convenience of any sovereign to make base money for us, there is nothing to prevent it. If for instance, the king of England, or any of his Birmingham artists, should coin Guineas worth but sixteen shillings sterling our citizens would readily and freely receive them at twenty-one shillings sterling. It is my duty to mention to Congress information I have received, that Guineas of base metal are coined at Birmingham so well, as to escape any common attention. Now there can be no doubt that every such Guinea received here, would be a national loss to us, of an English crown. How much we suffer in this way at present, it is impossible to estimate. What I have already had the honor to observe contains some of the reasons, why it appears to me highly necessary that an American coin should be adopted without delay, and to these reasons it may be added that there is a want of small money for the common occasions of trade and that it is more felt by our Soldiery, than any other persons. For the little pay which they *do* receive, being either in gold or at best in dollars, the sutlers and others with whom they have dealings, continually take the advantage of their want of change, and rate the prices of their goods accordingly.

Shortly after my appointment, finding that there was a considerable quantity of public Copper at Boston, I ordered it round to this place. It has safely arrived, and will when coined amount to a considerable sum. The necessary machinery of a mint can be easily made, and there are persons who can perform the whole business. I must pray leave, there-

fore, to submit to Congress, some few more particular remarks on this subject, as introductory to a plan for an American coin.

Although most nations have coined Copper, yet that metal is so impure that it has never been considered as constituting the Money Standard. This is affixed to the two precious metals, because they alone will admit of having their intrinsic value precisely ascertained; But nations differ very much in the relation, they have established between Gold and Silver. In some European countries an ounce of pure Gold passes for fifteen ounces of pure Silver; in others for fourteen. In China it passes for much less. The standard therefore, which is affixed to both metals, is in reality affixed to neither. In England Gold is to Silver nearly in the proportion of one to fifteen, and in France nearly of one to fourteen. If a man carries fourteen ounces of Gold from France to England, he receives two hundred and ten ounces of Silver which in France purchases fifteen ounces of Gold, so that he gains on that exchange one ounce of Gold. In like manner he who carries from England fourteen ounces of Silver to France, receives one ounce of Gold, which in England purchases fifteen ounces of Silver, wherefore he gains on that exchange one ounce of Silver.

If it be then supposed that the coins of these two countries were alike pure, it must follow that in a short time all the Gold coin of full weight would be in England; and all the Silver coin of full weight in France, But the light Silver circulating in England and the light Gold in France. the real standard of coin in each would be different from the legal, and seek a medium of fourteen and an half of Silver for one of Gold, altho' the legal standard might still be in the one place fifteen, and in the other fourteen.

The demand which commerce might make for any one of the precious metals in preference of the other, would vary this real standard from time to time, and in every payment a man would get more or less of real value for his debt, according as he was paid in the coin of greater or lesser value, in relation to the real standard. If, for instance, the debt were contracted when the Silver was to Gold, as one to fifteen, and paid when as one to fourteen; If the debt were paid in Silver he would gain one thirtieth, and if in Gold he would lose one thirtieth. In England the money standard is rather affixed to Gold than to Silver, because all payments are made in the former, and in France it is rather affixed to Silver than to Gold.

Arguments are unnecessary to shew that the scale by which everything is to be measured ought to be as fixed as the nature of things will permit of. Since therefore, a money standard affixed to both the precious metals will not give the certain scale, it is better to make use of one only. Gold is more valuable than Silver, and so far must have the preference, but it is from that very circumstance the more exposed to fraudulent practices. Its value rendering it more portable is an advantage, but it is an advantage which paper possesses in a much greater

degree, and of consequence the commercial nation of England has had recourse to paper for the purposes of its Trade; although the mass of circulating Coin is Gold. It will always be in our power to carry a paper circulation to every proper extent. There can be no doubt therefore, that our money standard ought to be affixed to Silver. But Silver is liable like everything else, to a change of value, if there is a demand for it, to export, the value will rise, if the contrary it will fall, and so far it cannot be considered as a fixed measure of value. Before this objection be considered it will be proper to make a few reflections on another part of the present subject, but in this place I remark, that if the objection cannot be removed we must not suffer it to preponderate, because it weighs alike against every other metal..

To coin money is a certain expense, and of course it is an expense which must be borne by the people. In England the coin when melted, will sell as Bullion for just as much as its weight in other coin. The expense of coinage is paid by the Crown, and of course it is raised by taxes from the people. In France the Coinage instead of being expensive, yields a profit.

The price given for metal at the mint is about eight per cent. less than the same quantity will yield when coined at the French Standard; both of these methods are liable to objections. When commerce demands an exportation of Bullion from England, the Coin of the kingdom goes out in common with others; this increases of course the national expense of coinage. Laws to prevent the exportation or importation of anything so valuable as money, are always nugatory, because they always *can* be eluded, and, therefore, when private interests requires, they always *will* be eluded. That the Guineas of England, therefore, are not continually going away, is to be attributed to the extraordinary value affixed to Gold, which has just been mentioned, and which banishes Silver continually.

In France the people are not liable to this inconvenience, because their Money passing for more than its value in Bullion, Bullion will always be exported in preference of coin; but for the same reason, there is always a strong temptation to imitate their coin, and send it for the purchase of their commodities. It would be both impossible and unnecessary to distinguish the true from the false, because both would be of equal intrinsic value; the place at which they were struck would be indifferent to the receiver, of consequence the foreigner who made French coin would gain by his trade, and the French nation would lose proportionately.

The money paid for coining, or the coinage, of France has, however this advantage, that the Money is a standard which does not fluctuate with the price of Bullion. This coining is as has been said, about 8 per cent. When Bullion is below ninety two, it is carried to the Mint, when above ninety-two to the Broker or Silversmith. The Coin still continues fixed, nor will it bear exportation until Bullion rises to an hundred, when the French Coin would be as liable to exportation as the

English. In that case it would be exported on one hand, while on the other no more would have been coined for a considerable period, because to make the 8 per cent coinage it is necessary that the Mint price should be ninety-two. The Coin therefore could not long be exported, if at all, but would soon resume its value. The price of Bullion must float between ninety-two and an hundred, while the Coin would preserve its fixed quality as Money.

Hence then it appears proper, that the price of coining should be defrayed by the coinage, because, first it is natural and proper, that the price should be paid when the benefit is received, and that the citizen in return for the advantage of being ascertained in the value of the medium of commerce by the sovereign, should pay for ascertaining it, just as that he should pay for the fashion of the plate he uses, or the construction of the cart he employs.

Secondly, It is right that money should acquire a value as money, distinct from that which it possesses as a commodity, in order that it should be a fixed rule whereby to measure the value of all other things; and thirdly it is wise to prevent the exportation of the coin, which would involve an unnecessary national expense, and also to prevent the imitation of it abroad, so as to create a national loss; for both which purposes it is proper that the coinage should only defray the expence, without making any considerable profit. The Laws usual in all countries with respect to the money will then fully operate the effect intended.

In order that a coin may be perfectly intelligible to the whole people, it must have some affinity to the former currency.

This therefore, will be requisite in the present case. The purposes of commerce require that the lowest divisible point of money or what is more properly called the money unit, should be very small; because by that means price can be brought in the smallest things to bear a proportion to the value, and altho' it is not absolutely necessary, yet it is very desirable that money should be increased in a decimal Ratio, because by that means all calculations of Interest, exchange, insurance and the like are rendered much more simple and accurate, and of course more within the power of the great mass of people. Whenever such things require much labor, time and reflection, the greater number who do not know, are made the dupes of the lesser number who do.

The various coins which have circulated in America have undergone different changes in their value, so that there is hardly any which can be considered as a general Standard, unless it be Spanish dollars; These pass in Georgia at five shillings, in North Carolina and New York, at eight shillings, in Virginia and the four Eastern States, at six shillings, in all the other States except South Carolina at seven shillings and sixpence, and in South Carolina at thirty-two shillings and sixpence. The money unit of a new coin to agree without a fraction with all these different values of a dollar except the last, will be the fourteen hundred and fortieth part of a dollar, equal to the sixteenth hundredth part of a crown; of these units twenty-four will be a penny of Georgia; fifteen

will be a penny of North Carolina or New York; twenty will be a penny of Virginia and the four Eastern States; sixteen will be a penny of all the other States except South Carolina, and forty-eight will be thirteen pence of South Carolina. It has been already observed, that to have the money unit very small is advantageous to commerce; but there is no necessity that this money unit be exactly represented in coin; it is sufficient that its value be precisely known. On the present occasion, two copper coins will be proper; the one of eight units, and the other of five. These may be called an eight and a five; two of the former will make a penny proclamation or Pennsylvania money; and three a penny Georgia money; of the latter three will make a penny York money; and four a penny lawful or Virginia money. The money unit will be equal to a quarter of a grain of fine Silver in coined money: Proceeding thence in a decimal ratio, one hundred would be the lowest Silver coin and might be called a cent. It would contain twenty-five grains of fine Silver, to which may be added two grains of copper, and the whole would weigh one pennyweight three grains: Five of these would make a quint or five hundred units, weighing five pennyweight fifteen grains; and ten would make a mark or one thousand units weighing eleven pennyweight six grains.

If the mint price of fine Silver be established at 22.237 units per pound; this, being coined, would be four times 5.760 grains or 23.040 units; the difference is 803 units, and, therefore, the coinage is 803 on 23.040, or somewhat more, than 3.48 per cent., which would be about the expense attending it. A Dollar contains by the best assays which I have been able to get, about 373 grains of fine Silver, and that at the mint price would be 1,440 units. In like manner, if Crowns contain from 414 to 415 grains of fine Silver, they would at the mint price be worth 1,600 units.

When such a Coin shall have been established, the value of all others would be easily ascertained, because nothing more would be necessary than to have them assayed at the mint. The advantage of possessing legal money in preference of any other; would induce people to carry foreign Coin to the mint, until a sufficiency were struck for the circulating medium. The remainder of the foreign Silver, together with the Gold, should be left, entirely to the operations of Commerce as Bullion.

In the present moment it is by no means of such consequence to establish the relative value of different Coins, as to provide a standard of our own by which in future to estimate them. If the value were now sought they must all be estimated in dollars, because dollars are called for in the several requisitions of Congress. Without noticing the preference, thus given to one foreign Coin over another, it is sufficient to observe, that if a greater alloy should be introduced by the Spanish Government into their dollars our interior Regulations as to money would be overturned, and certainly we have no security that this will not happen. There is not any great inconvenience from leaving matters on their present footing until they can be remedied by the operations of a mint; for it is not to be supposed that all the money raised by Taxes

in a State is to be brought out of it. I expect that there will be very little occasion to transport money from place to place. It is much easier to negotiate than to carry it; and if any species of Money is generally received within a State at the same rate in which it is paid in Taxes, there will be no difficulty in expending it at its value. Whenever Money shall be struck by Authority of the United States, then indeed it will be proper to receive in Taxes no other Coin

If Congress are of opinion with me, that it will be proper to coin Money, I will immediately obey their orders and establish a mint; and I think I can say with safety that no better moment could be chosen for the purpose than the present; neither will anything have a greater tendency to restore public credits, for although it is possible that the new money will at first be received with diffidence by some, yet when it has been fairly assayed it will gain full confidence from all, and the advantage of holding the only Money which can pay debts or discharge Taxes, will soon give it the preference over all, and indeed banish all other from Circulation; whereas, fixing a Relation of value now, on whatever principles attempted, might give offence to the Power whose Coin should in any instance be reduced from its present numerary value among us. These sentiments are submitted with all possible deference to the United States in Congress Assembled in expectation of their further instructions on the subject.

With great Respect I have the honor to be sir your most obedient and humble servant,

ROB. MORRIS.

His Excellency
The PRESIDENT OF CONGRESS.

[Endorsement.]

Report Sup^{d} Int^{d} finance on the establishment of a mint, Jan'y 15th, 1782.

Referred to grand comm'ee.

Reported May 13, 1785.

Printed with report and notes of Mr. Jefferson.

FROM THE JOURNAL OF CONGRESS.

THURSDAY, *February* 21, 1782.

On the report of a committee of the States, consisting of Mr. Livermore, Mr. Patridge, Mr. Cornell, Mr. Wolcott, Mr. Floyd, Mr. Clark, Mr. Clymer, Mr. Carroll, Mr. J. Jones, Mr. Hawkins, Mr. Middleton, Mr. Telfair, to whom was referred a letter of the 15th of January, from the superintendent of finance, touching the establishment of the mint:

Resolved, That Congress approve of the establishment of a mint; and, that the superintendent of finance be, and hereby is directed to prepare and report to Congress a plan for establishing and conducting the same.

ORDINANCE PROPOSED FOR THE VALUATION OF FOREIGN COINS.

By Robert Morris, *Superintendent of Finance.*

[From MS. letters of the Superintendent of Finance.]

Office of Finance,
12th Decem., 1782.

Sir: On the seventh of January last Congress were pleased to resolve that it be an Instruction to the Superintendent of Finance to prepare and report to Congress a table of rates at which different species of foreign Coins most likely to circulate within the United States shall be received at the Treasury thereof. In consequence of this resolution I took the liberty to recommend the establishment of a Mint, which was agreed to. I have taken many steps to carry that resolution into effect, and hoped by this time to have laid a satisfactory state of it before Congress.

Delays, the causes of which need not be enumerated, have hitherto procrastinated the matter beyond my expectations; but there are many reasons why an immediate regulation of foreign coins should now be made. It is not the least among them that all our dollars are rapidly going to the enemy in exchange for light gold, which must eventually cause a considerable loss, and a scarcity of silver which will be severely felt. I take the liberty therefore to suggest the following Act

Whereas by the Articles of Confederation and perpetual Union the United States in Congress assembled are vested with the sole and exclusive right and power of regulating the Alloy and Value of Coin struck by

their own Authority or by that of the respective States. and whereas the several requisitions on the States and the public accounts of these United States are made and kept in dollars. And whereas it is of importance that until Money be Coined by Authority of the United States some fixed proportion be established between the different foreign Coins most likely to circulate:

Be it therefore ordained by the United States in Congress assembled, and it is ordained by authority of the same that from and after the First Day of January in the Year of our Lord one thousand seven hundred and eighty-three, English silver Coin be received at the rate of one dollar and sixteen ninetieths of a dollar by the ounce, Dutch silver Coin at the rate of one dollar and fifteen ninetieths by the ounce, French silver Coin at the rate of one dollar and fourteen ninetieths by the ounce, Portugueeze silver Coin at the rate of one dollar and thirteen ninetieths by the ounce, English, Spanish and Portugueeze Gold Coin at the rate of seventeen dollars by the ounce, and French Gold Coin at the rate of sixteen dollars and sixty-eight ninetieths by the ounce.*

I take the liberty to observe, Sir, that this estimation of Coins is founded upon the quantity of Alloy which they respectively contain.

The weight of each particular piece current among us is so indeterminate that the value by tale cannot be fixed; but whenever the rates at which they go as Bullion are known, a table may be formed in each State for the tale according to the customary weights which prevail.

I have the honor to be sir your Excellency's most obedient and humble servant,

ROB'T MORRIS.

His Excellency The PRESIDENT OF CONGRESS.

[Endorsement.]

112.
Letter 12 Dec'r, 1782.
Sup't of Finance.
16th. Read and referred to—
Mr. Fitzsimmon.
Mr. Wharton.
Mr. Rutledge.
Mr. Hamilton.
Mr. Gorham.
Report ascertaining the value of foreign Coins.

* The rating of English Standard Silver at $1\frac{4}{9}$ dollars per ounce implies that the "dollar" should contain 377.02 grains of pure Silver, and the rule that seventeen of these dollars should be equivalent to an ounce of English Standard Gold implies that this dollar was equivalent to 25.882 grains of pure Gold. The ratio between the two metals as thus fixed is 1 to 14.56, which very nearly coincides with the then French legal ratio, and with the market ratio of the metals in Europe.—H.

[From MS. letters and reports of the Superintendent of Finance, No. 137, Vol. II, 355–363.]

OFFICE OF FINANCE,
23d April, 1783.

SIR: On the twenty-first of February 1782, Congress were pleased to approve of the Establishment of a Mint and to direct the Superintendant of Finance to prepare and report a plan for conducting it. This matter has been delayed by various Circumstances until the present Moment. I now enclose Specimens of a Coin with a view that if Congress should think proper to appoint a Committee on the Subject I may have the Honor of conferring with them, and explaining my Ideas of the Plan for establishing and conducting a Mint. Such plan when reported by a Committee will more probably meet the Ideas of Congress than any which I might prepare.

With perfect respect I have the Honor to be Sir your Excellency's most obedient & humble servant.

ROB'T MORRIS.

His Excellency the PRESIDENT OF CONGRESS.

[Endorsement.]

Letter 23, April, 1783.
Superi'nt finance.
Referred to Mr. Gorham,
Mr. Ellsworth,
Mr. Fitzsimmons,
Mr. Hamsley,
Mr. Izard.

The Com'ee of 19 Dec'r last on a letter of 12 Dec'r, from the Superint. for settling the rate of foreign Coin discharged & the business referred to the above Com'ee.

MR. JEFFERSON'S NOTES ON THE ESTABLISHMENT OF A MONEY UNIT AND OF A COINAGE FOR THE UNITED STATES.*

[In fixing the unit of money these circumstances are of principal importance.]

1. That it be of a convenient size to be applied as a measure to the common money transactions of life.

2. That its parts and multiples be in an easy proportion to each other so as to facilitate the Money Arithmetic

3. That the Unit and its parts or divisions be so nearly of the value of some of the known coins as that they may be of easy adoption for the people

The Spanish Dollar seems to fulfill all these conditions

1. Taking into our view all money transactions great and small, 1 question if a common measure of more convenient size than the dollar could be proposed. The value of 100. 1,000. 10,000 dollars is well estimated by the mind; so is that of the 10th or the hundredth of a dollar. Few transactions are above or below these limits. The expediency of attending to the size of the money Unit will be evident to any one who will consider how inconvenient it would be to a manufacturer or merchant, if instead of the yard for measuring cloth, either the inch or the mill had been made the unit of measure.

2. The most easy ratio of multiplication and division is that by ten.

* This paper is printed from a MS. which, as Mr. Dwight informs me, is in the hand of Mr. Charles Thompson, the Secretary of Congress, and which appears in Letters & Reports of the Superintendent of Finance, Vol. II, No. 137 of the MS. Records of the Continental Congress, beginning with page 363, and following directly after the letter of Mr. Morris here preceding it. It would therefore appear that Mr. Jefferson's notes were communicated to Congress simultaneously with Mr. Morris's letter. This paper is without date, but was written, it may be assumed, in 1782 or 1783.

Subsequently, in connection with the Propositions of the Committee here following, Mr. Jefferson's notes appear in print in folio form, bound in with the MS. in Reports of Committee on Finance, No. 26, p. 545–556.

I have added in the text in brackets certain instances of divergence of the printed copy from the MS.—H.

Every one knows the facility of decimal arithmetic. Every one remembers that when learning money arithmetic, he used to be puzzled with adding the farthings, taking out the fours and carrying them on, adding the pence taking out the twelves and carrying them on; adding the shillings, taking out the twenties and carrying them on; but when he came to the pounds, when he had only tens to carry forward, it was easy & free from error.

The bulk of mankind are school-boys thro' life. These little perplexities are always great to them. And even mathematical heads feel the relief of an easier substituted for a more difficult process. Foreigners, too who have trade or who travel among us will find a great facility in understanding our coins and accounts from this ratio of subdivision. Those who have had occasion to convert the livres, sols and deniers of the French, the Gilders Stivers and penings of the Dutch, the pounds, shillings, pence and farthings of these several states into each other can judge how much they would have been aided had their several subdivisions been in a decimal ratio. Certainly in all cases where we are free to chuse between easy and difficult modes of operation, it is most rational to chuse the easy. The financier. therefore in his report well proposes that our coins should be in decimal proportions to one another. If we adopt the dollar for our unit, we should strike four coins, one of gold, two of silver and one of copper viz

1. A Golden piece equal in value to 10 dollars.
2. The unit or dollar itself, of silver.
3. The tenth of a dollar, of silver also.
4. The hundredth of a dollar of copper.

Compare the arithmetical operations on the same sum of money expressed in this form, & expressed in the pound sterling and its divisions:

ADDITION.

£	s.	d.	[Dollars.]
8	13	11½	=38.65
4	12	8½	=20.61
13	6	8½	=59.26

SUBTRACTION.

£	s.	d.	[Dollars.]
8	13	11½	=38.65
4	12	8½	=20.61
4	1	2¾	18.04

MULTIPLICATION BY 8.

[£	s.	d.	qrs.	Dollars.]
8	13	11½		=38.65
20				8
173				309.2 D
12				
2087	or	8	13.	11½
4				8
8350		69	11	8
8				
66800				
½ 16700				
¼ 1391	8			
⅛ [£]69	11	8		

DIVISION BY 8.

[£	s.	d.	qrs.	Dollars.]
8	13	11½		=38.65
20				8)———
173				4.83
·12				
2087				
4				
8)8350				
4)1043⅞				
12)260¼				
20) 21.8				
[£] 1.	1.	8¾		

A bare inspection of the above operation will evince the labour which is occasioned by subdividing the unit into 20^{ths} 240^{ths} and 960^{ths} as the English do and as we have done; and the case of subdivisions in a decimal ratio. The same difference arises in making payment An Englishman to pay £8. 13.11½ must find by calculation what combination of the coins of His country will pay this sum. But an American having the same sum to pay thus expressed 38.65 will know by inspection only that three golden pieces 8 units or dollars 6 tenths and 5 coppers pay it precisely.

3 The third condition required is that the unit, its multiples and subdivisions coincide in value with some of the known coin so nearly, that the people may by a quick reference in the mind estimate their value. If this be not attended to, they will be very long in adopting the innovation, if ever they adopt it. Let us examine in this point of view each of the four coins proposed. 1. The golden piece will be $\frac{1}{8}$ more than a half Joe* and $\frac{1}{75}$ more than a double guinea. It will be readily estimated then by reference to either of them but more readily and accurately as equal to 10 dollars.

2 The unit or dollar is a known coin and the most familiar of all to the mind, of the people. It is already adopted from South to North, has identified our currency and therefore happily offers itself as an Unit already introduced. Our public debt, our requisitions and their apportionments have given it actual and long possession of the place of Unit. The course of our commerce too will bring us more of this than of any other foreign coin, and therefore renders it more worthy of attention. I know of no Unit which can be proposed in competition with the dollar, but the pound: But what is the pound? 1547 grains of fine silver in Georgia: 1289 grains in Virginia, Connecticut, Rhode Island, Massachusetts and New Hampshire; 1031¼ grains in Maryland, Delaware Pennsylvania and New Jersey; 966¾ grains in North Carolina and New York.

Which of these shall we adopt? To which State give that pre-eminence of which all are so jealous? And on which impose the difficulties of a new estimate for their coin, their cattle and other commodities. Or shall we hang the pound sterling as a common badge about all their necks? This contains 1718¾ grains of pure silver. It is difficult to familiarise a new coin to a people. It is more difficult to familiarise them to a new coin with an old name. Happily the Dollar is familiar to them all, and is already as much referred to for a measure of value as their respective State [provincial] pounds.

3. The tenth will be precisely the Spanish bit or half pistreen in some of the States, and in others will differ from it but a very small fraction. This is a coin perfectly familiar to us all. When we shall make a new

*The "Half-Joe", or piece of 6400 rees was a Portuguese coin 22 carats fine weighing one half ounce of Portugal equal to about 221 grains Troy.—H.

coin then equal in value to this, it will be of ready estimate with the people.

4. The hundreth or copper will be very nearly the penny or copper of New York and North Carolina, this being $\frac{1}{96}$ of a dollar, and will not be very different from the penny or copper of New Jersey, Pennsylvania, Delaware, and Maryland, which is $\frac{1}{90}$ of a dollar. It will be about the medium between the old and the new coppers of these States and therefore will soon be substituted for them both. In Virginia coppers have never been in use. It will be as easy therefore to introduce them there of one value as of another. The copper coin proposed will be nearly equal to three-fourths of their penny which is the same with the penny lawful of the Eastern States. A great deal of small change is useful in a State, and tends to reduce the prices of small articles. Perhaps it would not be amiss, to coin three [two] more pieces of silver, one of the value of five-tenths or half a dollar, one of the value of two tenths, which would be equal to the Spanish pistreen, and one of the value of 5 coppers, which would be equal to the Spanish half bit. We should then have four silver coin viz:

1. The Unit or Dollar
2. The half dollar or five tenths [omitted in the printed copy.]
3. The double tenth, equal to 2 or $\frac{1}{5}$ of a dollar to a pistreen
4. The tenth, equal to a Spanish bit
5. The five copper piece equal to 05 or $\frac{1}{20}$ of a dollar or to the half bit.

The plan reported by the financier is worthy of his sound judgment. It admits however of objection in the size of the unit. He proposes that this shall be the 1440th part of a dollar; so that it will require 1440 of his units to make them the one before proposed. He was led to adopt this by a mathematical attention to our old currencies, all of which this unit will measure without leaving a fraction. But as our object is to get rid of those currencies, the advantage derived from this coincidence will soon be past. Whereas the inconveniences of this unit will forever remain, if they do not altogether prevent its introduction. It is defective in two of the three requisites of a money Unit.

1. It is inconvenient in its application to the ordinary money transactions. 10.000 dollars will require 8. figures to express them, to wit. 14.400.000. A horse or bullock of 80 dollars value will require a notation of six figures to wit 115.200 units. As a money of account this will be laborious even when facilitated by the aid of decimal arithmetic. As a common measure of the value of property it will be too minute to be comprehended by the people. The French are subjected to very laborious calculations, the livre being their ordinary money of account, and this but between the $\frac{1}{5}$ & $\frac{1}{8}$ of a dollar. But what will be our labours should our money of account be $\frac{1}{1440}$ of a dollar only?

2. It is neither equal nor near to any of the known coins in value.

If we determine that a dollar shall be our Unit, we must then say with precision what a dollar is. This coin as struck at different times, of

different weights and fineness is of different values. Sir Isaac Newton's Assay and representation to the lords of the treasury in 1717 of those which he examined make their values, as follows

	dwt	grs		grains	
The Seville piece of eight	17.	12	containing	387	of pure Silver.
The Mexico piece of eight	17.	$10\frac{5}{9}$	"	$385\frac{1}{4}$	"
The Pillar piece of eight	17.	9	"	$385\frac{1}{4}$	"
The new Seville piece of eight	14.		"	$308\frac{7}{10}$	"

The financier states the old dollar as containing 376 grains of fine silver and the new 365 grains. If the dollars circulating among us be of every date equally, we should examine the quantity of pure metal in each and from them form an average for our Unit. This is a work proper to be committed to Mathematicians as well as merchants and which should be decided on actual and accurate experiment.

The quantum of alloy is also to be decided. Some is necessary to prevent the coin from wearing too fast. Too much fills our pockets with coppers instead of silver. The silver coins assayed by Sir Isaac Newton varied from $1\frac{1}{2}$ to 76 pennyweight alloy in the pound troy of mixed metal. The British standard has 18 dwt. The Spanish coins assayed by Sir Isaac Newton have from 18 to $19\frac{1}{2}$ dwt. The new French crown has in fact $19\frac{1}{2}$, though by edict it should have 20 dwt, that is $\frac{1}{12}$. The taste of our countrymen will require that the [their] furniture plate should be as good as the British standard. Taste cannot be controuled by law. Let it then give the law in a point, which is indifferent to a certain degree. Let the Legislatures fix the alloy of furniture plate at 18 dwt. the British standard, and Congress that of their coin at one ounce in the pound, the French standard. This proportion has been found convenient for the alloy of gold coin and it will simplify the system of our mint to alloy both metals in the same degree. [The coin too being the least pure will be less easily melted into plate.] These reasons are light indeed and of course will only weigh, if no heavier ones can be opposed to them.

The proportion between the values of gold and silver is a mercantile problem altogether. It would be inaccurate to fix it by the popular exchanges of a half Joe for eight dollars, a Louis for 4 French crowns or five Louis for 23 dollars. The first of these would be to adopt the Spanish proportion between gold and silver; the second the French, the third a mere popular barter, wherein convenience is consulted more than accuracy. The legal proportion in Spain is 16 for 1. in England $15\frac{1}{5}$ for 1. in France [uncertain in the U. S. in the printed copy,] 15 for 1 The Spaniards and English are found in experience to retain an over proportion of gold coins and to lose their silver. The French have a greater proportion of silver. The difference at market has been on the decrease. The financier states it at present at $14\frac{1}{2}$ for 1.

Just principles will lead us to disregard legal proportions altogether; to enquire into the market price of gold in the several countries with

which we shall principally be connected in commerce, and to take an average from them. Perhaps we might with safety lean to a proportion somewhat above par for gold, considering our neighbourhood and commerce with the sources of the coins and the tendency which the high price of gold in Spain has to draw thither all that of their mines, leaving silver principally for our and other markets. It is not impossible that 15 for 1 may be found an eligible proportion. I state it however as conjectural only.

As to the alloy for gold coin, the British is an ounce in the pound; the French, Spanish and Portugese differ from that only from ¼ of a gram [to a grain] and a half. I should therefore prefer the British, merely because its fraction stands in a more simple form and facilitates the calculations into which it enters.

Should the unit be fixed at 365 grains of pure silver gold at 15 for 1, and the alloy of both be one-twelfth the weight of the coins will be as follows.

	Grains.		Grains.		Dwt.	Grs.
The gold piece cont'g	243¼	pure metal	22.12	of alloy will weigh....	11:	145
The unit or dollar	365	"	33.18	"	16:	14.18
*The half doll. or 5-tenths.	182½	"	16.59	"	8:	7.09
The fifth or pistreen	73	"	6.63	"	3:	7.63
The tenth or bit	36½	"	3.318	"	1:	15.818
The twentieth or half-bit..	18¼	"	1.659	"		19.9

The quantity of fine silver, which shall constitute the unit being settled and the proportion of the value of gold to that of silver; a table should be formed from the assay before suggested, classing the several foreign coins according to their fineness, declaring the worth of a pennyweight or grain in each class and that they shall be lawful tender at those rates if not clipped or otherwise diminished, and where diminished offering their value for them at the mint, deducting the expence of recoinage. Here the legislatures should co-operate with Congress in providing that no money be received or paid at their treasuries or by any of their officers or any bank but on actual weight; in making it criminal in a high degree to diminish their own coins and in some smaller degree to offer them in payment when diminished

That this subject may be properly prepared and in readiness for Congress to take up at their meeting in November, something must now be done. The present session drawing to a close they probably would not choose to enter far into this undertaking themselves. The Committee of the States however, during the recess, will have time to digest it thoroughly, if Congress will fix some general principles for their government.

Suppose then they be instructed—

To appoint proper persons to assay and examine with the utmost accuracy practicable the Spanish milled dollars of different dates in circulation with us.

To assay and examine in like manner the fineness of all the other coins which may be found in circulation within these states.

* This is omitted in the printed copy.

To receive and lay before Congress the reports on the result of these assays.

To appoint also proper persons to enquire what are the proportions between the values of fine gold and fine silver at the markets, of the several countries with which we are or probably may be connected in commerce and what would be the proper proportion here, having regard to the average of their values at those markets and to other circumstances and to report the same to the Committee to be by them laid before Congress.

To prepare an Ordinance for establishing the Unit of money within these states; for subdividing it and for striking coins of gold, silver and copper on the following principles

That the money unit of these States shall be equal in value to a Spanish milled dollar containing so much fine silver as the assay before directed shall show to be contained, on an average in dollars of the several dates circulating with us.

That this Unit shall be divided into tenths and hundredths,

That there shall be a coin of silver of the value of an Unit One other of the same metal of the value of one tenth of an unit One other of copper of the value of the hundredth of an unit That there shall be a coin of gold of the value of ten Units, according to the report before directed and the judgment of the Committee thereon.

That the alloy of the said coins of gold and silver shall be equal in weight to one eleventh part of the fine metal

That there be proper devices for these coins

That measures be proposed for preventing their diminution and also their currency and that of any others when diminished

That the several foreign coins be described and classed in the said ordinance, the fineness of each class stated and its value by weight estimated in Units and decimal parts of an Unit, and that the said draught of an Ordinance be reported to Congress at their next meeting for their consideration and determination

REPORT OF A GRAND COMMITTEE ON THE MONEY UNIT.

1785.

[From MS. Reports of the Committee on Finance of Continental Congress, vol. 26, pp. 537–560.]

PROPOSITIONS RESPECTING THE COINAGE OF GOLD, SILVER AND COPPER.

1st. The value of Silver compared with Gold.

2d The weight or size of the several pieces of money that are to be made,

3d The Money Arithmetic or the mode in which it is to be counted and

4th The Charges of Coinage are to be considered.

1. In France 1 grain of pure Gold is counted worth 15 grains of silver. In Spain 16 grains of Silver are exchanged for 1 of Gold and in England 15$\frac{1}{5}$th. In both of the Kingdoms last mentioned Gold is the prevailing Money, because Silver is under valued. In France Silver prevails. Sundry advantages would arise to us from a system by which silver might become the prevailing money. This would operate as a bounty to draw it from our neighbours by whom it is not sufficiently esteemed. Silver is not exported so easily as gold and it is a more useful metal.

Certainly our Exchange should not be more than 15 gr of silver for 1 of Gold. It has been alledged by the late Financier that we should not give more than 14½. perhaps 14¾ would be a better medium considering the quantity of Gold that may be expected from Portugal.

2 The weight, size or value of the several pieces of money that shall be made or rather the most convenient value of the money unit is a question not easily determined considering that most of the citizens of the U. S. are accustomed to count in Pounds Shillings and Pence and that those sums are of different values in the different states, hence they convey no distinct ideas. The money of the U. S. should be equally fitted to all. The late Financier has proposed to make gold and silver Pieces of particular weight, and there is a very simple process by which the imaginary money of the several States may be translated into such pieces or vice versa. He proposes that the Money Unit be one quarter of a grain of pure silver. that the smallest coin be of Copper which shall be worth 5 of those Units. The smaller silver coin to be worth 100 units, another to be worth 500, another of 1000 and thus increasing decimally.

The objections to this plan are that it introduces a coin unlike in value to anything now in use; It departs from the national mode of keeping accounts, and tends to preserve inconvenient prejudices whence it must prevent national uniformity in accounts; a thing greatly to be desired.

Another plan has been offered, which proposes, that the money unit be one dollar; and the smallest coin is to be of copper, of which 200 shall pass for one dollar. This plan also proposes, that the several pieces shall increase in a dicimal ratio; and that all accounts be kept in decimals, which is certainly by much the most short and simple mode.

In favour of this plan it is urged, that a dollar, the proposed unit, has long been in general use; its value is familiar. This accords with the national mode of keeping accounts, and may in time produce the happy effect of uniformity in counting money through-out the Union.

3. The money Arithmetic, though an important question, is one that can admit of little dispute. All accomptants must prefer decimals.

4. What is the best mode of defraying the expense of coinage? Different nations have adopted different systems. The British value their Silver when coined, no higher than Bullion; Hence it follows that the expense of the mint, increasing the civil list, must be paid by a general tax; and tradesmen are disposed to work up the current coin, by which the tax is increased and continued. In some other countries Silver or Gold when coined, are valued above the price of Bullion; whence tradesmen are discouraged from melting or working up the current coin, and the mint is rather profitable than burdensome. Certainly there are good and conclusive reasons, why we should value the national coin above the price of Bullion; but there is a certain point beyond which we may not proceed, lest we encourage counterfeits, or private imitations of our coin. It has been proposed to make a difference of $2\frac{1}{2}$ P. C^t nearly as an allowance for the Coinage of Gold and of 3.013 P. C^t for the coinage of silver. It is probable that 3 P. C^t would more than defray the expense of coining silver, in which case it would be a temptation to private imitation and would operate against the free circulation of the money as being

valued too high. It is to be remembered that silver coin ought to be encouraged and probably 2 P. C^{t} or 2¼ P. C^{t} would be a proper difference between silver coined and Bullion; The same difference to be made in the price of Gold. If this does not fully pay the expences of the mint there will be a much larger gain on the coinage of copper and if there should remain a small balance against the mint its operation will not be unfavourable.

The Coinage of Copper is a subject that claims our immediate attention. From the small value of the several pieces of copper coin this medium of exchange has been too much neglected. The more valuable metals are daily giving place to base British half-pence and no means are used to prevent the fraud. This disease which is neglected in the beginning because it appears trifling may finally prove very destructive to commerce. It is admitted that Copper may at this instant be purchased in America at ⅛ of a Dlr. the pound. British half-pence made at the Tower are 48 to the pound. Those manufactured at Birmingham and shipped in thousands for our use are much lighter and they are of base metal, it can hardly be said that 72 of them are worth a pound of copper. Hence it will follow that we give for British half-pence about six times their value. There are no materials from which we can estimate the weight of half-pence that have been imported from Britain since the late war, but we have heard of sundry shipments being ordered, to the nominal amount of 1,000 guineas, and we are told that no Packet arrives from England by which we are not accommodated with some hundred weight of base half-pence. It is a very moderate computation which states our loss on the last twelve months at 30 thousand dollars by the commerce of vile coin. The whole expense of a mint would not have amounted to half of that sum, and the whole expense of domestic coinage would remain in the country.

The following forms of money are submitted:

	Dlrs.
1 Piece of Gold of	5.
1 Do of silver of	*1
1 Do	½ or .5
1 Do	¼ or .25
1 Do	1/10 or .1
1 Do	1/20 or .05
1 Piece of copper of	1/100 or .01
1 Do	1/200 or .005

The quantity of pure silver being fixed that is to be in the Unit or Dlr and the relation between Silver and Gold being fixed, all the other weights must follow. When it is considered that the Spaniards have been reducing the weight of their Dlrs and that instead of 385, the grains of pure silver in the old Mexico dollar the new dollars have not more than 365 grains it will hardly be thought that 362 grains of pure silver is too little for the federal coin which is to be current in all payments for one dollar.

* Containing 362 gr. pure silver. This the Unit or money of account.

Some of the old Dlrs will admit of a second coinage, but the new ones will not. If the value of Gold compared to that of Silver be fixed at 15 to one, and the alloy in each be $\frac{1}{12}$th the weight of the several denominations will be readily determined. The price of bullion is immediately determined by the percentage that is charged towards the expenses of the mint. If the United States shall determine to adhere to the dollar as their money of account, and to simplify accounts by the use of decimals, there is nothing to prevent the immediate commencement of a coinage of copper.

Let the copper pieces, of which 100 are to pass for a Dlr, contain each 131 grains of pure copper, or 44 of them weigh 1 Pound. In this case our copper coin, when compared with the money of accot., will be 6 p. ct. better than that of Great Britain. There will remain a sufficient profit on the coinage.

Copper of the best quality in plates, may be purchased in Europe at 10*d*.½ stg. In cutting blanks there will be a waste of 22 p. ct. Those clippings are worth 7*d*.½ p. lb. Thence the blanks will cost 11*d*.½ nearly; it may be stated at 1*s*. 9*d*., New York money p. pound, exclusive of the expense of cutting them, which is not great, as one man can readily cut 100 weight in a day.

The operation, improperly called milling, by which the sharp edges are worn off from the coppers, is not more expensive than cutting the blanks. In the process of coining Copper, eight artists or labourers may be required. One Engraver, 1 Labourer for the blank press One Smith, 5 Labourers for the Coining Press.

By those people 100 weight of Copper may readily be coined every day, or the value of 44 Dlrs. Deducting the necessary expenses, there may be saved 30 p. ct.

[The endorsement upon this document is as follows:]

Report of grand Com'ee.

Rece'd May 13. 1785.

Thursday next assigned for consideration

To be printed with the plans of the late Superin't of finance and of Mr. Jefferson

Postponed.

Mint established on principles reported by the board of treasury and passed Aug. 8th, 1786

See instructions to Delegates of Massachusetts, read Dec. 3d, 1784

THE RESOLUTIONS ON COINAGE OF JULY 6, 1785.

WEDNESDAY, *July* 6, 1785.

Congress took into consideration the report of a grand committee, consisting of Mr. Howell, Mr. Foster, Mr. King, Mr. Cook, Mr. Smith, Mr. Beatty, Mr. Gardner, Mr. Vining, Mr. Hindman, Mr. Monroe, Mr.

Williamson, Mr. Pinckney and Mr. Houston, on the subject of a money unit;

And on the question, that the money unit of the United States of America be one dollar, the yeas and nays being required by Mr. Howell; every member answering *ay*, it was

Resolved, That the money unit of the United States of America be one dollar.

Resolved, That the smallest coin be of copper, of which 200 shall pass for one dollar.

Resolved, That the several pieces shall increase in a decimal ratio.

THE COINAGE SYSTEM PROPOSED TO CONGRESS APRIL 8, 1786, BY SAMUEL OSGOOD AND WALTER LIVINGSTON, WHO CONSTITUTED THE BOARD OF TREASURY.

[On the 8th of April, 1786, the Board of Treasury directed to the President of Congress their report on certain principles for establishing a mint, accompanied by a letter to the President of Congress.

The report was in triplicate, and contained, as will be seen below, three distinct schemes, each of which was set forth in the report with great particularity.

These documents, still I believe, unpublished, are to be found in the library of the State Department in MS. Vol. 139, pp. 131–217, of Letters and Reports of the Superintendent of Finance.

These recommendations of the Board of Treasury not being followed by the actual establishment of a mint, a certain confusion which was allowed to appear in the presentation of their views to Congress was not corrected at the time, and hence was not then eliminated from their reports. Their report was, as I have said, in triplicate. Each of these reports proposed a Silver dollar as the unit. Gold pieces of 10 and 5 dollars, the application of the decimal system to the Coinage, $\frac{11}{12}$ as the fineness of either metal.

Report No. 1 proposed a Silver dollar of 375.64 grains fine. Gold pieces at 24.6268 grains fine to the dollar. This would give a ratio of 15.256 between the Coins. The intention was expressed of fixing a mint charge at 2 per cent. for Silver and ½ per cent. for Gold, which would have given the relative price of Bullion at the mint of 15.47, but the mint price was not fixed to correspond to this intention. In the choice of the ratio the Board allude to the ratio prevailing at that time in America at 15.60, but do not mention the details upon which this statement was based. (See page 441).

Report No. 2 proposes a dollar of 350.09 grains fine, Gold pieces at 23.79 grains fine to the dollar, and a mint price per pound troy of Stand-

dard, at $220.832 for Gold, and $14.746 of Silver. The relative price of Bullion at the mint would thus be 14.97, the ratio of the Coin, 14.749.

Report No. 3 proposes a dollar of 521.73 grains fine, Gold pieces (including a quarter eagle) at 34.782 grains to the dollar, a mint price of $151.038 for Gold, and $9.92 for Silver. The ratio of the Coin would thus be 15 to 1, while the relative price of Bullion would be 15.22.—H.]

THE RESOLUTIONS ON COINAGE OF AUGUST 8, 1786.

TUESDAY, *August* 8, 1786.

On a report of the Board of Treasury.

Resolved, That the Standard of the United States of America for Gold and Silver, shall be Eleven parts fine, and one part alloy.

That the Money Unit of the United States, being by the resolve of Congress of the 6th July, 1785, a dollar, shall contain of fine silver, $375\frac{64}{100}$ grains.

That the money of account, to correspond with the division of coins agreeably to the above resolve, proceed in a decimal ratio agreeably to the forms and manner following, viz.

Mills: the lowest money of accompt, of which one thousand shall be equal to the federal dollar, or money unit,..... 0.001

Cents: the highest copper piece, of which one hundred shall be equal to the dollar,..... 0.010

Dimes: the lowest silver coin, ten of which shall be equal to the dollar..... 0.100

Dollar: the highest silver coin..... 1.000

That betwixt the dollar and the lowest copper coin, as fixed by the resolve of Congress of the 6th July, 1785, there shall be three silver coins and one copper coin. That the silver coins shall be as follows:

One coin containing $187\frac{82}{100}$ grains of fine silver, to be called a half dollar:

One Coin containing $75\frac{128}{1000}$ grains of fine silver, to be called a double dime:

And one coin containing $37\frac{360}{1000}$ grains of fine silver, to be called a dime.

That the two copper coins shall be as follows:—

One equal to the 100th part of the federal dollar, to be called a cent.

One equal to the 200th part of the federal dollar, to be called a half cent:

That two pounds and a quarter avoirdupois weight of copper, shall constitute 100 cents.

That there shall be two gold coins: One containing $246\frac{268}{1000}$ grains of fine gold, equal to 10 dollars, and to be stamped with the impression of the American eagle, and to be called an eagle:

One containing 123 $\frac{344}{1000}$ grains of fine gold, equal to 5 dollars, to be stamped in like manner, and to be called a half eagle.

That the mint price of a pound troy weight of uncoined silver, 11 parts fine and one part alloy, shall be 9 dollars, 9 dimes and 2 cents.*

That the mint price of a pound troy weight of uncoined gold, 11 parts fine and one part alloy, shall be 209 dollars, 7 dimes, and 7 cents.

Ordered that the Board of Treasury report a draft of an ordinance for the establishment of a mint.

From Letters from the Board of Treasury, No. 140, Vol. 2, pp. 323-325.

BOARD OF TREASURY,
September 20, 1786.

SIR: We request the Favor of your Excellency to lay before Congress a Report by this Board of the plan of an ordinance for the Establishment of a Mint for the United States of America. This Object is of so much importance to the Interest of the Union, that we doubt not it will meet with the early attention of the United States in Congress.

In a Letter, which we had the Honor of addressing to Congress on the 8th of April last, we informed that Honorable Body of the rapid Increase of base Copper Coin, which was Imported into, or manufactured in the Several States. The necessity of adopting measures for supplying with as little delay as possible a quantity of Copper struck under the Authority of the United States sufficient for the General Circulation of the Union, must be very apparent. Without this is effected, it will be Impossible to decry the present Copper Currency, however base it is.

From a Consideration of the different Propositions which have at different times been made to this Board on the subject of Copper Coinage, we have Reason to think that the profits which might be derived from that object would defray the greatest part if not the whole of the Expense of the Mint; in which Case the profits arising from the Coinage of Gold and Silver would be clear Gain.

Congress will observe that it is proposed by the Ordinance to fix a Period, after which no Foreign Copper Coin shall be current within the United States. What this Period ought to be will depend on the time of the Establishment of the Mint; in all Probability within the Space of Nine Months after the date of passing the Ordinance, a sufficient quantity of the Federal Copper might be coined to give efficacy to the Provisions proposed by the Ordinance for preventing the Manufacture and Circulation of base Copper Coin.

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*This is a manifest error. The mint price of Silver in Dollars of 521.73 grains, provided for in The Third Report of the Board of Treasury was $9.92, and these figures have crept into the Resolution as they did also in one portion of First Report of the Board.

It may not be improper to inform Congress that the Copper belonging to the United States which was at Boston has been ordered by the Board to this City, where it is now deposited.

We have the Honor to be with respect Your Excellency's Most Obedient Humble Servants

SAMUEL OSGOOD
ARTHUR LEE

His Excellency the PRESIDENT OF CONGRESS.

MINT ORDINANCE OF OCTOBER 16, 1786.

MONDAY, *October* 16, 1786.

Congress assembled: Present, Massachusetts, Rhode-Island, New-York, New-Jersey, Pennsylvania, Maryland, Virginia, South-Carolina and Georgia.

Congress resumed the consideration of the Ordinance for the establishment of a mint, and the same being read a third time, was passed as follows:

AN ORDINANCE for the establishment of the Mint of the United States of America, and for regulating the value and alloy of coin.

It is hereby ordained by the United States in Congress assembled, that a mint be established for the coinage of gold, silver and copper Money, agreeably to the resolves of Congress of the 8th August last, under the direction of the following officers, viz.

An Assay-Master, whose duty it shall be to receive gold and silver in bullion, or foreign coin, to assay the same and to give his certificates for the value thereof at the following rates:

For every pound troy weight of uncoined gold or foreign gold coin, 11 parts fine and one part alloy, 209 dollars, 7 dimes and 7 cents, Money of the United States, as established by the resolves of Congress of the 8th of August last, and so in proportion to the fine gold contained in any coined or uncoined gold whatsoever.

For every pound troy weight of uncoined silver, or foreign silver coin, 11 parts fine and one part alloy, 13 dollars, 7 dimes 7 cents and 7 mills, money of the United States, established as aforesaid; and so in proportion to the fine silver contained in any coined or uncoined silver whatsoever.*

A Master Coiner, whose duty it shall be to receive, from time to time, of the assay-master, the bullion necessary for coinage; to report to Congress devices and proofs of the proposed pieces of coin, and to procure proper workmen to execute the business of coinage, reporting, from time to time, to the commissioners of the board of treasury of the United States for approbation, and allowance, the occupation, number and pay of the persons so employed.

*The Mint charge thus fixed is about two per cent. upon both Gold and Silver, bringing the rate of bullion at the Mint to 15.22, a little below the ratio in the coin. H.

A Pay-Master, who shall be the treasurer of the United States for the time being, whose duty it shall be to receive and take charge of the coin made under the direction of the master coiner, and to receipt for the same; to receive and duly enter the certificates for uncoined gold or silver issued by the assay-master, and to pay $\frac{95}{100}$ of the amount thereof in gold or silver, and $\frac{5}{100}$ in the copper coin of the United States.

And it is hereby further ordained, That the certificates to be given by the assay-master, to persons who shall lodge gold or silver in the mint for coinage, shall be on fine blank paper, and expressed in the manner and form following, to wit:

MINT OF THE UNITED STATES.

I acknowledge to have received of A. B. for coinage, (here insert the weight) of (insert the species) bullion, for the amount of which pay to ——— ——— or bearer, the sum of ——— at ten days sight, agreeably to the custom of the Mint.

C. D. *Assay-Master.*

To E. F. *Pay-master of the Mint of the United States of America.*

[The further provisions of the law concerning the salaries of officer, etc., are here omitted.]

And it is hereby further ordained, That the copper coin struck under the authority of the United States in Congress assembled, shall be receivable in all taxes, or payments due to the United States, in the proportion of 5 dollars for every hundred dollars so paid;* but that no other copper coin whatsoever, shall be receivable in any taxes or payments whatsoever to the United States.

And whereas, the great quantities of base copper coin daily imported into, or manufactured within the several States, is become so highly injurious to the interest and commerce of the same, as to require the immediate interposition of the powers vested by the confederation in the United States in Congress assembled, of regulating the value of copper, the coin so current as aforesaid;

It is hereby ordained, That no foreign copper coin whatsoever, shall, after the first day of September, 1787, be current within the U. States of America: And that no copper coin struck under the authority of a particular state, shall pass at a greater value than one Federal dollar for two pounds and one quarter of a pound, avoirdupois weight, of such copper coin.

Done, &c.

* This provision is interesting as one of the not numerous instances in which the experiment has been tried of making a particular kind of money receivable for a certain fraction of payments, but without further limitation of the amount.

In the middle of the last century the Netherlands coined, on government account, the *Ryder*, a Gold 14-florin piece, struck at the ratio of 14.62 to 1 of Silver as a legal tender for one-third of any payment.

About the same time French copper was, I believe, legal tender for one-fortieth of any payment.

At the beginning of this century Government Paper Money in Portugal was legal tender for half of any payment.—H.

REPORT OF ALEXANDER HAMILTON ON THE ESTABLISHMENT OF A MINT.

IN THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES.

Saturday, May 5, 1791.

On motion,

Ordered, That the report of the Secretary of the Treasury, relatively to the establishment of a Mint, which was made to this House on Friday, the 28th ultimo, be sent to the Senate for their information.

Extract from the Journal.

JOHN BECKLEY, *Clerk.*

The Secretary of the Treasury having attentively considered the subject referred to him by the order of the House of Representatives, of the fifteenth day of April last, relative to the establishment of a Mint, most respectfully submits the result of his inquiries and reflections.

A plan for an establishment of this nature, involves a great variety of considerations, intricate, nice, and important. The general state of debtor and creditor; all the relations and consequences of price; the essential interests of trade and industry; the value of all property; the whole income, both of the State and of individuals, are liable to be sensibly influenced, beneficially or otherwise, by the judicious or injudicious regulation of this interesting object.

It is one, likewise, not more necessary than difficult to be rightly adjusted; one which has frequently occupied the reflections and researches of politicians, without having harmonized their opinions on some of the most important of the principles which enter into its discussion. Ac-

cordingly, different systems continue to be advocated, and the systems of different nations, after much investigation, continue to differ from each other.

But if a right adjustment of the matter be truly of such nicety and difficulty, a question naturally arises, whether it may not be most adviseable to leave things in this respect, in the state in which they are? Why, might it be asked, since they have so long proceeded in a train which has caused no general sensation of inconvenience, should alterations be attempted, the precise effect of which cannot with certainty be calculated?

The answer to this question is not perplexing. The immense disorder which actually reigns in so delicate and important a concern, and the still greater disorder which is every moment possible, call loudly for a reform. The dollar originally contemplated in the money transactions of this country, by successive diminutions of its weight and fineness, has sustained a depreciation of five per cent.; and yet the new dollar has a currency, in all payments in place of the old, with scarcely any attention to the difference between them. The operation of this in depreciating the value of property depending upon past contracts, and (as far as inattention to the alteration in the coin may be supposed to leave prices stationary) of all other property, is apparent. Nor can it require argument to prove that a nation ought not to suffer the value of the property of its citizens to fluctuate with the fluctuations of a foreign mint, and to change with the changes in the regulations of a foreign sovereign. This, nevertheless, is the condition of one which, having no coins of its own, adopts with implicit confidence those of other countries.

The unequal values allowed, in different parts of the Union, to coins of the same intrinsic worth; the defective species of them which embarrass the circulation of some of the States; and the dissimilarity in their several moneys of account, are inconveniences which, if not to be ascribed to the want of a national coinage, will at least be most effectually remedied by the establishment of one: a measure that will, at the same time, give additional security against impositions by counterfeit as well as by base currencies.

It was with great reason, therefore, that the attention of Congress, under the late confederation, was repeatedly drawn to the establishment of a mint; and it is with equal reason that the subject has been resumed, now that the favorable change which has taken place in the situation of public affairs admits of its being carried into execution.

But, though the difficulty of devising a proper establishment ought not to deter from undertaking so necessary a work, yet it cannot but inspire diffidence in one, whose duty it is made to propose a plan for the purpose, and may perhaps be permitted to be relied upon as some excuse for any errors which may be chargeable upon it, or for any deviations from sounder principles which may have been suggested by others, or even in part acted upon by the former Government of the United States.

In order to a right judgment of what ought to be done, the following particulars require to be discussed:

1st. What ought to be the nature of the money unit of the United States?

2d. What the proportion between gold and silver, if coins of both metals are to be established?

3d. What the proportion and composition of alloy in each kind?

4th. Whether the expense of coinage shall be defrayed by the Government, or out of the material itself?

5th. What shall be the number, denominations, sizes, and devices of the coins?

6th. Whether foreign coins shall be permitted to be current or not; if the former, at what rate, and for what period?

A prerequisite to determining with propriety what ought to be the money unit of the United States, is to endeavor to form as accurate an idea as the nature of the case will admit of what it actually is. The pound, though of various value, is the unit in the money of account of all the States. But it is not equally easy to pronounce what is to be considered as the unit in the coins. There being no formal regulation on the point, (the resolutions of Congress of the 6th of July, 1785, and 8th of August, 1786, having never yet been carried into operation,) it can only be inferred from usage or practice. The manner of adjusting foreign exchanges, would seem to indicate the dollar as best entitled to that character. In these, the old piaster of Spain, or old Seville piece of eight *rials*, of the value of four shillings and six-pence sterling, is evidently contemplated. The computed par between Great Britain and Pennsylvania, will serve as an example. According to that, one hundred pounds sterling is equal to one hundred and sixty-six pounds and two-thirds of a pound, Pennsylvania currency; which corresponds with the proportion between 4*s.* 6*d.* sterling, and 7*s.* 6*d.* the current value of the dollar in that State, by invariable usage. And, as far as the information of the Secretary goes, the same comparison holds in the other States.

But this circumstance in favor of the dollar, loses much of its weight from two considerations. That species of coin has never had any settled or standard value, according to weight or fineness, but has been permitted to circulate by tale, without regard to either, very much as a mere money of convenience, while gold has had a fixed price by weight, and with an eye to its fineness. This greater stability of value of the gold coins, is an argument of force for regarding the money unit as having been hitherto virtually attached to gold, rather than to silver.

Twenty-four grains and six-eighths of a grain of fine gold, have corresponded with the nominal value of the dollar in the several States, without regard to the successive diminutions of its intrinsic worth.

But, if the dollar should, notwithstanding, be supposed to have the best title to being considered as the present unit in the coins, it would remain to determine what kind of dollar ought to be understood; or, in other words, what precise quantity of fine silver.

The old piaster of Spain, which appears to have regulated our foreign exchanges, weighed 17 dwt. 12 grains, and contained 386 grains and 15 mites of fine silver. But this piece has been long since out of circulation. The dollars now in common currency, are of recent date, and much inferior to that, both in weight and fineness. The average weight of them, upon different trials, in large masses, has been found to be 17 dwt. 8 grains. Their fineness is less precisely ascertained; the results of various assays made by different persons, under the direction of the late Superintendent of the Finances, and of the Secretary, being as various as the assays themselves. The difference between their extremes is not less than 24 grains in a dollar of the same weight and age; which is too much for any probable differences in the pieces. It is rather to be presumed, that a degree of inaccuracy has been occasioned by the want of proper apparatus, and, in general, of practice. The experiment which appears to have the best pretensions to exactness, would make the new dollar to contain 370 grains and 933 thousandth parts of a grain of pure silver.

According to an authority on which the Secretary places reliance, the standard of Spain for its silver coin in the year 1761, was 261 parts fine, and 27 parts alloy; at which proportion, a dollar of 17 dwt. 8 grains, would consist of 377 grains of fine silver, and 39 grains of alloy. But there is no question that this standard has been since altered considerably for the worse: to what precise point, is not as well ascertained as could be wished; but, from a computation of the value of dollars in the markets both of Amsterdam and London, (a criterion which cannot materially mislead,) the new dollar appears to contain about 368 grains of fine silver and that which immediately preceded it about 374 grains.

In this state of things, there is some difficulty in defining the dollar, which is to be understood as constituting the present money unit, on the supposition of its being most applicable to that species of coin. The old Seville piece of 386 grains and 15 mites fine, comports best with the computations of foreign exchanges, and with the more ancient contracts respecting landed property; but far the greater number of contracts still in operation concerning that kind of property, and all those of a merely personal nature, now in force, must be referred to a dollar of a different kind. The actual dollar at the time of contracting, is the only one which can be supposed to have been intended; and it has been seen that, as long ago as the year 1761, there had been a material degradation of the standard. And even in regard to the more ancient contracts, no person has ever had any idea of a scruple about receiving the dollar of the day as a full equivalent for the nominal sum which the dollar originally imported.

A recurrence, therefore, to the ancient dollar, would be in the greatest number of cases an innovation *in fact*, and, in all, an innovation in respect to opinion. The actual dollar in common circulation has evidently a much better claim to be regarded as the actual money unit.

The mean intrinsic value of the different kinds of known dollars has been intimated as affording the proper criterion. But, when it is recollected that the more ancient and more valuable ones are not now to be met with at all in circulation, and that the mass of those generally current is composed of the newest and most inferior kinds, it will be perceived that even an equation of that nature would be a considerable innovation upon the real present state of things; which it will certainly be prudent to approach, as far as may be consistent with the permanent order designed to be introduced.

An additional reason for considering the prevailing dollar as the standard of the present money unit, rather than the ancient one, is, that it will not only be conformable to the true existing proportion between the two metals in this country, but will be more conformable to that which obtains in the commercial world generally.

The difference established by custom in the United States between coined gold and coined silver has been stated, upon another occasion, to be nearly as 1 to 15.6. This, if truly the case, would imply that gold was extremely overvalued in the United States; for the highest *actual proportion*, in any part of Europe, very little, if at all, exceeds 1 to 15; and the average proportion throughout Europe is probably not more than about 1 to 14.8. But that statement has proceeded upon the idea of the ancient dollar. One pennyweight of gold of twenty-two carats fine, at 6*s.* 8*d.*, and the old Seville piece of 386 grains and 15 mites of pure silver, at 7*s.* 6*d.*, furnish the exact ratio of 1 to 15.6262. But this does not coincide with the real difference between the metals in our market, or, which is with us the same thing, in our currency. To determine this, the quantity of fine silver in the general mass of the dollars now in circulation must afford the rule. Taking the rate of the late dollar of 374 grains, the proportion would be as 1 to 15.11. Taking the rate of the newest dollar, the proportion would then be as 1 to 14.87. The mean of the two would give the proportion of 1 to 15, very nearly; less than the legal proportion in the coins of Great Britain, which is as 1 to 15.2; but somewhat more than the actual or market proportion, which is not quite 1 to 15.

The preceding view of the subject does not indeed afford a precise or certain definition of the present unit in the coins, but it furnishes data which will serve as guides in the progress of the investigation. It ascertains, at least, that the sum in the money of account of each State, corresponding with the nominal value of the dollar in such State, corresponds also with 24 grains and $\frac{8}{9}$ of a grain of fine gold; and with something between 368 and 374 grains of fine silver.

The next inquiry towards a right determination of what ought to be the future money unit of the United States, turns upon these questions: Whether it ought to be peculiarly attached to either of the metals, in preference to the other or not? and, if to either, to which of them?

The suggestions and proceedings hitherto have had for their object the

annexing of it emphatically to the silver dollar. A resolution of Congress of the 6th of July, 1785, declares that the money unit of the United States shall be a dollar; and another resolution of the 8th of August, 1786, fixes that dollar at 375 grains and 64 hundredths of a grain of fine silver. The same resolution, however, determines that there shall also be two gold coins: one of 246 grains and 268 parts of a grain of pure gold, equal to ten dollars; and the other, of half that quantity of pure gold, equal to five dollars. And it is not explained whether either of the two species of coins, of gold or silver, shall have any greater legality in payments than the other. Yet it would seem that a preference in this particular is necessary to execute the idea of attaching the unit exclusively to one kind. If each of them be as valid as the other, in payments to any amount, it is not obvious in what effectual sense either of them can be deemed the money unit, rather than the other.

If the general declaration, that the dollar shall be the money unit of the United States, could be understood to give it a superior legality in payments, the institution of coins of gold, and the declaration that each of them shall be *equal* to a certain number of dollars, would appear to destroy that inference. And the circumstance of making the dollar the unit in the money of account, seems to be rather matter of form than of substance.

Contrary to the ideas which have heretofore prevailed, in the suggestions concerning a coinage for the United States, though not without much hesitation, arising from a deference for those ideas, the Secretary is, upon the whole, strongly inclined to the opinion, that a preference ought to be given to neither of the metals for the money unit. Perhaps, if either were to be preferred, it ought to be gold rather than silver.

The reasons are these:

The inducement to such a preference is, to render the unit as little variable as possible; because on this depends the steady value of all contracts, and, in a certain sense, of all other property. And it is truly observed, that if the unit belong indiscriminately to both the metals, it is subject to all the fluctuations that happen in the relative value which they bear to each other. But the same reason would lead to annexing it to that particular one, which is itself the least liable to variation; if there be, in this respect, any discernible difference between the two.

Gold may, perhaps, in certain senses, be said to have greater stability than silver; as, being of superior value, less liberties have been taken with it, in the regulations of different countries. Its standard has remained more uniform, and it has, in other respects, undergone fewer changes; as, being not so much an article of merchandise, owing to the use made of silver in the trade with the East Indies and China, it is less liable to be influenced by circumstances of commercial demand. And if, reasoning by analogy, it could be affirmed, that there is a physical probability of greater proportional increase in the quantity of silver than in that of gold, it would afford an additional reason for calculating on greater steadiness in the value of the latter.

As long as gold, either from its intrinsic superiority as a metal, from its greater rarity, or from the prejudices of mankind, retains so considerable a pre-eminence in value over silver, as it has hitherto had, a natural consequence of this seems to be that its condition will be more stationary. The revolutions, therefore, which may take place in the comparative value of gold and silver, will be changes in the state of the latter, rather than in that of the former.

If there should be an appearance of too much abstraction in any of these ideas, it may be remarked, that the first and most simple impressions do not naturally incline to giving a preference to the inferior or least valuable of the two metals.

It is sometimes observed, that silver ought to be encouraged rather than gold, as being more conducive to the extension of bank circulation, from the greater difficulty and inconvenience which its greater bulk, compared with its value, occasions in the transportation of it. But bank circulation is desirable, rather as *an auxiliary to*, than as *a substitute for* that of the precious metals, and ought to be left to its natural course.* Artificial expedients to extend it, by opposing obstacles to the

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* HAMILTON'S SELECTION OF THE RATIO OF 15.

The idea here analyzed and rejected by Hamilton was, long afterward, in Jackson's administration seized upon by Mr. Benton, then successfully waging war against the policy of a National Bank, which was identified with Hamilton's name, and the accusation of an insincere intention to overrate Silver in the adoption of the ratio of 15, was fulminated against Mr. Benton's opponents, the Bank party, although Hamilton, personally, was exonerated of the charge.

Mr. Benton was naturally unaware that as late as 1803 the monetary directors of France had been seriously inclined to follow in Hamilton's footsteps (see page 304), and he appears unconscious of the contradiction between statements that the Gold currency of the United States where Gold was 15 to 1 was supported by the importation of doubloons, and that these doubloons came from a country where Gold was worth 16 or 17 to 1. He appears, however, willfully to have ignored the testimony, (see pages 675, 678,) which was not out of his reach, to the effect that the concurrent circulation of the two metals at 15 (with that *vis inertiæ* which is one of the unsettled problems of Money) did not succumb to the influences of foreign demand until the drain began for the Resumption of Gold payment in England.

If this testimony be correct, and I know no reason to doubt it, the Double Standard at the ratio of 15 was justified by the experience of nearly a generation. The selection of 15 would have been justified by the experience of the nineteenth century, had the French Legislator of 1803 not been hampered in his choice, and prevented from adopting this ratio, by the presence of a large mass of Gold Coins in circulation whose weight needed, in a country where Silver was the monetary unit, to be increased by 3 per cent. in order to attain 15. Thus the coining of Gold tokens in 1785, Legal-Tender for more than their market value entailed the supposed necessity of making the false ratio of 1785 a true one for the nineteenth century. Whether Hamilton was or was not aware that De Calonne had introduced the ratio of 15½ in France, the condition of opinion in France in 1791 was not such as would justifiy any one in demanding of Hamilton an absolute foreknowledge that that ratio would come to wield the power over the metals which it acquired after 1803. The seigniorial system, now a thing of the remote past in France, was then a thing of the present and presumably of the future. That mobility of the metals, therefore, which shows itself when Coinage is

other, are at least not recommended by any very obvious advantages. And, in general, it is the safest rule to regulate every particular institution or object, according to the principles which, in relation to itself, appear the most sound. In addition to this, it may be observed, that the inconvenience of transporting either of the metals, is sufficiently great to induce a preference of bank paper, whenever it can be made to answer the purpose equally well.

But, upon the whole, it seems to be most adviseable, as has been observed, not to attach the unit exclusively to either of the metals; because this cannot be done effectually, without destroying the office and character of one of them as money, and reducing it to the situation of a mere merchandise; which, accordingly, at different times, has been proposed from different and very respectable quarters; but which would probably be a greater evil than occasional variations in the unit, from the fluctuations in the relative value of the metals; especially if care be taken to regulate the proportion between them, with an eye to their average commercial value.

To annul the use of either of the metals, as money, is to abridge the quantity of circulating medium; and is liable to all the objections which arise from a comparison of the benefits of a full, with the evils of a scanty circulation.

It is not a satisfactory answer to say, that none but the favored metal would in this case find its way into the country, as in that all balances must be paid. The practicability of this would, in some measure, depend on the abundance or scarcity of it in the country paying. Where

cheap or gratuitous, and at the same time free, had not yet been manifested by the ponderous metallic stock of France. So, as concerns England, the prospect that she would withdraw from Silver the right to become English Money, and would tower amid the monetary field as the lifter-up of the rating of Gold, could not count for much in the calculations of a statesman.

As far as the Peninsula and its American Colonies were concerned, we may ask whether the reasoning based upon peculiarities of geographical and commercial position, which, to the eyes of De Calonne, justified England in expecting to draw Gold from Portugal, although Portugal rated Gold 5 per cent. higher than did England, and which justified his own adoption for France of 15½ with the purpose of drawing Gold from Spain which rated it at 16, have applied with equal force to this country? When the monetary history of the Spanish and Portuguese countries is written it will be possible to explain such phenomena with certainty; in the mean time I hazard the query whether, in fact, these ratios of 16, nay of 17, according to Mr. Benton and others, were not merely rates at which light Coins were struck for the convenience and for the profit of the government as the equivalent of the heavier Coins previously in circulation, but without forcible displacement of these heavier Coins, and with no elevation of the Legal Tender power of the latter as compared with Silver. But in any case, even if the market rates of the metals in the Spanish and Portuguese countries had been 16, the view maintained by De Calonne (page 257) and by Mr. Benton (page 484), as to their controlling importance would be unjustified. The demand of Europe had maintained Silver at the rate of 1 to less than 15 of Gold for a century, in spite of the wavering, gold-favoring, coinage policy of these countries. For near a century the rate of 15.21 had failed to bring aught but Gold to English Mints. What in fact could these countries, that owned the mines of America, have done to

there was but little, it either would not be procurable at all, or it would cost a premium to obtain it; which, in every case of a competition with others, in a branch of trade, would constitute a deduction from the profits of the party receiving. Perhaps, too, the embarrassments which such a circumstance might sometimes create, in the pecuniary liquidation of balances, might lead to additional efforts to find a substitute in commodities, and might so far impede the introduction of the metals. Neither could the exclusion of either of them be deemed, in other respects, favorable to commerce. It is often, in the course of trade, as desirable to possess the kind of money, as the kind of commodities best adapted to a foreign market.

It seems, however, most probable, that the chief, if not the sole, effect of such a regulation, would be to diminish the utility of one of the metals. It could hardly prove an obstacle to the introduction of that which was excluded in the natural course of trade, because it would always command a ready sale for the purpose of exportation to foreign markets. But such an effect, if the only one, is not to be regarded as a trivial inconvenience.

If, then, the unit ought not to be attached exclusively to either of the

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counterbalance the influence of Europe? Spain and Portugal and their colonies were not enriched with varied industries and by the accumulations of long and intelligent activity in production. They must sell their metal and even if they had sought to sell all their Silver, the sale of which at 15 offered profit to those who valued it less, and thus had attempted to use Gold exclusively, they could not have held any great quantity of it. Moreover, the colonies were naturally led to coin their bullion, and so long as it was in America, and the fact that their mines yielded far more Silver than Gold necessarily compelled them to hold a great part of their stock of Money in Silver. The center of gravity of the Precious Metals was then, as it is to-day, in Europe: simply because Europe holds in compact form, and bases exchanges infinite upon, the preponderating stock of the two metals combined.

On reflecting therefore the light of experience upon the probabilities as they stood in 1791, the selection of the ratio of 15 by Hamilton stands in fair relief against the policy of other lands. Events which were neither to be foreseen nor controlled, made it necessary to abandon it; but *per se*, for the time, the selection was better statesmanship than the selection of 15.21 by England in 1717, than the selection of 15½ by De Calonne, than the ratification of 15½ by Gaudin in 1803. As for the latter it has justified itself in the nineteenth century, but not because of statesmanship or science, because of the weight of metal it unconsciously carried. With free coinage of Bimetallic Money in France and a stock of metal greater than that of any other two nations, it may well be maintained that in the existing equilibrium of supply and of demand in other countries, it lay in the hands of the French legislator to fix the "normal" ratio for the century.

Had Gaudin chosen 15 it would have been maintained; had he chosen 16 the American legislator would have had a valid reason for adopting it.

A passage in Benton's address on the Gold Currency, to which perhaps it is due that the learned chief Delegate of Switzerland was misled in his criticism, before the Conference, of Hamilton's selection of a ratio, (see page 81) may appropriately be put of record in connection with Hamilton's utterances on the point in issue. On account of its length this passage is printed after the conclusion of the report.—(See pages 484.)

H.

metals, the proportion which ought to subsist between them, in the coins, becomes a preliminary inquiry, in order to its proper adjustment. This proportion appears to be, in several views, of no inconsiderable moment.

One consequence of overvaluing either metal, in respect to the other, is the banishment of that which is undervalued. If two countries are supposed, in one of which the proportion of gold to silver is as 1 to 16, in the other as 1 to 15, gold being worth more, silver less, in one than in the other, it is manifest that, in their reciprocal payments, each will select that species which it values least, to pay to the other where it is valued most. Besides this, the dealers in money will, from the same cause, often find a profitable traffic in an exchange of the metals between the two countries. And hence it would come to pass, if other things were equal, that the greatest part of the gold would be collected in one, and the greatest part of the silver in the other. The course of trade might in some degree counteract the tendency of the difference in the legal proportions by the market value; but this is so far and so often influenced by the legal rates, that it does not prevent their producing the effect which is inferred. Facts, too, verify the inference. In Spain and England, where gold is rated higher than in other parts of Europe, there is a scarcity of silver; while it is found to abound in France and Holland, where it is rated higher in proportion to gold than in the neighboring nations. And it is continually flowing from Europe to China and the East Indies, owing to the comparative cheapness of it in the former, and dearness of it in the latter.

This consequence is deemed by some not very material; and there are even persons who, from a fanciful predilection to gold, are willing to invite it, even by a higher price. But general utility will best be promoted by a due proportion of both metals. If gold be most convenient in large payments, silver is best adapted to the more minute and ordinary circulation.

But it is to be suspected that there is another consequence, more serious than the one which has been mentioned. This is the diminution of the total quantity of specie which a country would naturally possess.

It is evident that as often as a country, which overrates either of the metals, receives a payment in that metal, it gets a less actual quantity than it ought to do, or than it would do if the rate were a just one.

It is also equally evident, that there will be a continual effort to make payment to it in that species to which it has annexed an exaggerated estimation, wherever it is current at a less proportional value. And it would seem to be a very natural effect of these two causes, not only that the mass of the precious metals in the country in question would consist chiefly of that kind to which it had given an extraordinary *value*, but that it would be absolutely less than if they had been duly proportioned to each other.

A conclusion of this sort, however, is to be drawn with great caution.

In such matters, there are always some local and many other particular circumstances, which qualify and vary the operation of general principles, even where they are just; and there are endless combinations, very difficult to be analyzed, which often render principles, that have the most plausible pretensions, unsound and delusive.

There ought, for instance, according to those which have been stated to have been formerly a greater quantity of gold in proportion to silver in the United States, than there has been; because the actual value of gold in this country, compared with silver, was perhaps higher than in any other. But our situation in regard to the West India islands, into some of which there is a large influx of silver directly from the mines of South America, occasions an extraordinary supply of that metal, and consequently a greater proportion of it in our circulation than might have been expected from its relative value.

What influence the proportion under consideration may have upon the state of prices, and how far this may counteract its tendency to increase or lessen the quantity of the metals, are points not easy to be developed; and yet they are very necessary to an accurate judgment of the true operation of the thing.

But however impossible it may be to pronounce with certainty, that the possession of a less quantity of specie is a consequence of overvaluing either of the metals, there is enough of probability in the considerations which seem to indicate it, to form an argument of weight against such overvaluation.

A third ill consequence resulting from it is, a greater and more frequent disturbance of the state of the money unit, by a greater and more frequent diversity between the legal and market proportions of the metals. This has not hitherto been experienced in the United States, but it has been experienced elsewhere; and from its not having been felt by us hitherto, it does not follow that this will not be the case hereafter, when our commerce shall have attained a maturity, which will place it under the influence of more fixed principles.

In establishing a proportion between the metals, there seems to be an option of one of two things—

To approach, as nearly as it can be ascertained, the mean or average proportion, in what may be called the commercial world; or,

To retain that which now exists in the United States. As far as these happen to coincide, they will render the course to be pursued more plain and more certain.

To ascertain the first, with precision, would require better materials than are possessed, or than could be obtained, without an inconvenient delay.

Sir Isaac Newton, in a representation to the Treasury of Great Britain, in the year 1717, after stating the particular proportions in the different countries of Europe, concludes thus:—"By the course of trade and exchange between nation and nation, in all Europe, fine gold is to fine silver as $14\frac{4}{5}$, or 15 to 1."

But however accurate and decisive this authority may be deemed, in relation to the period to which it applies, it cannot be taken, at the distance of more than seventy years, as a rule for determining the existing proportion. Alterations have been since made in the regulations of their coins by several nations; which, as well as the course of trade, have an influence upon the market values. Nevertheless, there is reason to believe, that the state of the matter, as represented by Sir Isaac Newton, is not very remote from its actual state.

In Holland, the greatest *money* market of Europe, gold was to silver, in December, 1789, as 1 to 14.88; and in that of London it has been, for some time past, but little different, approaching perhaps something nearer 1 to 15.

It has been seen that the existing proportion between the two metals in this country is about as 1 to 15.

It is fortunate, in this respect, that the innovations of the Spanish mint have imperceptibly introduced a proportion so analogous as this is to that which prevails among the principal commercial nations, as it greatly facilitates a proper regulation of the matter.

This proportion of 1 to 15 is recommended by the particular situation of our trade, as being very nearly that which obtains in the market of Great Britain; to which nation our specie is principally exported. A lower rate for either of the metals, in our market, than in hers, might not only afford a motive the more, in certain cases, to remit in specie rather than in commodities; but it might, in some others, cause us to pay a greater quantity of it for a given sum than we should otherwise do. If the effect should rather be to occasion a premium to be given for the metal which was underrated, this would obviate those disadvantages; but it would involve another, a customary difference between the market and legal proportions, which would amount to a species of disorder in the national coinage.

Looking forward to the payments of interest hereafter to be made to Holland, the same proportion does not appear ineligible. The present legal proportion in the coins of Holland is stated at 1 to $14\frac{9}{10}$. That of the market varies somewhat at different times, but seldom very widely from this point.

There can hardly be a better rule in any country, for the legal, than the market proportion, if this can be supposed to have been produced by the free and steady course of commercial principles. The presumption in such case is, that each metal finds its true level, according to its intrinsic utility, in the general system of money operations.

But it must be admitted that this argument in favor of continuing the existing proportion is not applicable to the state of the coins with us. There have been too many artificial and heterogeneous ingredients—too much want of order in the pecuniary transactions of this country—to authorize the attributing the effects which have appeared to the regular operations of commerce. A proof of this is to be drawn from the

alterations which have happened in the proportion between the metals merely by the successive degradations of the dollar, in consequence of the mutability of a foreign mint. The value of gold to silver appears to have declined, wholly from this cause, from $15\frac{6}{10}$ to about 15 to 1; yet, as this last proportion, however produced, coincides so nearly with what may be deemed the commercial average, it may be supposed to furnish as good a rule as can be pursued.

The only question seems to be, whether the value of gold ought not to be a little lowered, to bring it to a more exact level with the two markets which have been mentioned; but, as the ratio of 1 to 15 is so nearly conformable to the state of those markets, and best agrees with that of our own, it will probably be found the most eligible. If the market of Spain continues to give a higher value to gold (as it has done in time past) than that which is recommended, there may be some advantage in a middle station.

A further preliminary to the adjustment of the future money unit is, to determine what shall be the proportion and composition of alloy in each species of the coins.

The first, by the resolution of the 8th of August, 1786, before referred to, is regulated at one-twelfth, or in other words, at 1 part alloy to 11 parts fine, whether gold or silver; which appears to be a convenient rule; unless there should be some collateral consideration which may dictate a departure from it. Its correspondency, in regard to both metals, is a recommendation of it, because a difference could answer no purpose of pecuniary or commercial utility, and uniformity is favorable to order.

This ratio, as it regards gold, coincides with the proportion, real or professed, in the coins of Portugal, England, France and Spain. In those of the two former, it is real; in those of the two latter, there is a deduction for what is called *remedy of weight and alloy*, which is in the nature of an allowance to the master of the mint for errors and imperfections in the process; rendering the coin either lighter or baser than it ought to be. The same thing is known in the theory of the English mint, where $\frac{1}{6}$ of a carat is allowed. But the difference seems to be, that *there*, it is merely an occasional indemnity within a certain limit, for real and unavoidable errors and imperfections; whereas, in the practice of the mints of France and Spain, it appears to amount to a stated and regular deviation from the nominal standard. Accordingly, the real standards of France and Spain are something worse than 22 carats, or 11 parts in 12 fine.

The principal gold coins in Germany, Holland, Sweden, Denmark, Poland, and Italy, are finer than those of England and Portugal, in different degrees, from 1 carat and $\frac{1}{4}$ to 1 carat and $\frac{7}{8}$, which last is within $\frac{1}{8}$ of a carat of pure gold.

There are similar diversities in the standards of the silver coins of the different countries of Europe. That of Great Britain is 222 parts

fine, to 18 alloy; those of the other European nations vary from that of Great Britain as widely as from about 17 of the same parts better, to 75 worse.

The principal reasons assigned for the use of alloy, are the saving of expense in the refining of the metals, (which in their natural state are usually mixed with a portion of the coarser kinds,) and the rendering of them harder as a security against too great waste by friction or wearing. The first reason, drawn from the original composition of the metals, is strengthened at present by the practice of alloying their coins, which has obtained among so many nations. The reality of the effect to which the last reason is applicable, has been denied, and experience has been appealed to as proving that the more alloyed coins wear faster than the purer. The true state of this matter may be worthy of future investigation, though first appearances are in favor of alloy. In the mean time, the saving of trouble and expense are sufficient inducements to following those examples which suppose its expediency. And the same considerations lead to taking as our models those nations with whom we have most intercourse, and whose coins are most prevalent in our circulation. These are Spain, Portugal, England, and France. The relation which the proposed proportion bears to their gold coins, has been explained. In respect to their silver coins, it will not be very remote from the mean of their several standards.

The component ingredients of the alloy in each metal, will also require to be regulated. In silver, copper is the only kind in use, and it is doubtless the only proper one. In gold, there is a mixture of silver and copper; in the English coins consisting of equal parts, in the coins of some other countries varying from $\frac{1}{3}$ to $\frac{2}{3}$ silver.

The reason of this union of silver with copper is this: The silver counteracts the tendency of the copper to injure the color or beauty of the coin, by giving it too much redness, or rather a coppery hue, which a small quantity will produce; and the copper prevents the too great whiteness which silver alone would confer. It is apprehended that there are considerations which may render it prudent to establish, by law, that the proportion of silver to copper in the gold coins of the United States shall not be more than $\frac{1}{2}$, nor less than $\frac{1}{8}$; vesting a discretion in some proper place to regulate the matter within those limits, as experience in the execution may recommend.

A third point remains to be discussed, as a prerequisite to the determination of the money unit, which is, whether the expense of coining shall be defrayed by the public, or out of the material itself; or, as it is sometimes stated, whether coinage shall be free, or shall be subject to a duty or imposition? This forms, perhaps, one of the nicest questions in the doctrine of money.

The practice of different nations is dissimilar in this particular. In England, coinage is said to be entirely free; the mint price of the metals in bullion being the same with the value of them in coin. In France,

there is a duty, which has been, if it is not now, eight per cent. In Holland, there is a difference between the mint price and the value in the coins, which has been computed at .96, or something less than one per cent. upon gold; at 1.48, or something less than one and a half per cent. upon silver. The resolution of the 8th of August, 1786, proceeds upon the idea of a deduction of a half per cent. from gold, and of two per cent. from silver, as an indemnification for the expense of coining. This is inferred from a report of the late board of treasury, upon which that resolution appears to have been founded.

Upon the supposition that the expense of coinage ought to be defrayed out of the metals, there are two ways in which it may be effected: one, by a reduction of the quantity of fine gold and silver in the coins; the other, by establishing a difference between the value of those metals in the coins, and the mint price of them in bullion.

The first method appears to the Secretary inadmissible. He is unable to distinguish an operation of this sort from that of raising the denomination of the coin; a measure which has been disapproved by the wisest men of the nations in which it has been practised, and condemned by the rest of the world. To declare that a less weight of gold or silver shall pass for the same sum, which before represented a greater weight; or to ordain that the same weight shall pass for a greater sum, are things substantially of one nature. The consequence of either of them, if the change can be realized, is to degrade the money unit; obliging creditors to receive less than their just dues, and depreciating property of every kind; for it is manifest that every thing would, in this case, be represented by a less quantity of gold and silver than before.

It is sometimes observed, on this head, that though any article of property might, in fact, be represented by a less actual quantity of pure metal, it would nevertheless be represented by something of the same intrinsic value. Every fabric, it is remarked, is worth intrinsically the price of the raw material and the expense of fabrication; a truth not less applicable to a piece of coin than to a yard of cloth.

This position, well founded in itself, is here misapplied. It supposes that the coins now in circulation are to be considered as bullion, or, in other words, as a raw material; but the fact is, that the adoption of them as money, has caused them to become the fabric; it has invested them with the character and office of coins, and has given them a sanction and efficacy, equivalent to that of the stamp of the sovereign. The prices of all our commodities, at home and abroad, and of all foreign commodities in our markets, have found their level in conformity to this principle. The foreign coins may be *divested* of the privilege they have hitherto been permitted to enjoy, and may of course be *left* to find their value in the market as a raw material. But the quantity of gold and silver in the national coins, corresponding with a given sum, cannot be made less than heretofore, without disturbing the balance of intrinsic value, and making every acre of land, as well as every bushel of wheat,

of less actual worth than in time past. If the United States were isolated, and cut off from all intercourse with the rest of mankind, this reasoning would not be equally conclusive. But it appears decisive, when considered with a view to the relations which commerce has created between us and other countries.

It is, however, not improbable, that the effect meditated would be defeated by a rise of prices proportioned to the diminution of the intrinsic value of the coins. This might be looked for in every enlightened commercial country; but perhaps in none with greater certainty than in this - because in none are men less liable to be the dupes of sounds; in none has authority so little resource for substituting names for things.

A general revolution in prices, though only nominally, and in appearance, could not fail to distract the ideas of the community; and would be apt to breed discontents as well among those who live on the income of their money, as among the poorer classes of the people, to whom the necessaries of life would seem to have become dearer. In the confusion of such a state of things, ideas of value would not improbably adhere to the old coins, which, from that circumstance, instead of feeling the effect of the loss of their privilege as money, would perhaps bear a price in the market relatively to the new ones, in exact proportion to weight. The frequency of the demand for the metals to pay foreign balances, would contribute to this effect.

Among the evils attendant on such an operation, are these: creditors, both of the public and of individuals, would lose a part of their property; public and private credit would receive a wound; the effective revenues of the government would be diminished. There is scarcely any point in the economy of national affairs, of greater moment than the uniform preservation of the intrinsic value of the money unit. On this the security and steady value of property essentially depend.

The second method, therefore, of defraying the expense of the coinage out of the metals, is greatly to be preferred to the other. This is to let the same sum of money continue to represent in the new coins exactly the same quantity of gold and silver as it does in those now current; to allow at the mint such a price only for those metals as will admit of profit just sufficient to satisfy the expense of coinage; to abolish the legal currency of the foreign coins, both in public and private payments; and of course to leave the superior utility of the national coins for domestic purposes, to operate the difference of market value, which is necessary to induce the bringing of bullion to the mint. In this case, all property and labor will still be represented by the same quantity of gold and silver as formerly; and the only change which will be wrought, will consist in annexing the office of money exclusively to the national coins; consequently, withdrawing it from those of foreign countries, and suffering them to become, as they ought to be, mere articles of merchandise.

The arguments in favor of a regulation of this kind are: First. That the want of it is a cause of extra expense: there being then no motive

of individual interest to distinguish between the national coins and bullion, they are, it is alleged, indiscriminately melted down for domestic manufactures, and exported for the purposes of foreign trade; and it is added, that when the coins become light by wearing, the same quantity of fine gold or silver bears a higher price in bullion than in the coins; in which state of things, the melting down of the coins to be sold as bullion is attended with profit; and from both causes, the expense of the mint, or, in other words, the expense of maintaining the specie capital of the nation, is materially augmented.

Secondly. That the existence of such a regulation promotes a favorable course of exchange, and benefits trade; not only by that circumstance, but by obliging foreigners, in certain cases, to pay dearer for domestic commodities, and to sell their own cheaper.

As far as relates to the tendency of a free coinage to produce an increase of expense in different ways that have been stated, the argument must be allowed to have foundation, both in reason and in experience. It describes what has been exemplified in Great Britain.

The effect of giving an artificial value to bullion, is not at first sight obvious; but it actually happened at the period immediately preceding the late reformation in the gold coin of the country just named. A pound troy in gold bullion, of standard fineness, was then from 19*s.* 6*d.* to 25s. sterling dearer than an equal weight of guineas, as delivered at the mint. The phenomenon is thus accounted for—the old guineas were more than two per cent. lighter than their *standard weight.* This *weight*, therefore, in bullion, was truly worth two per cent. more than those guineas. It consequently had, in respect to them, a correspondent rise in the market.

And as guineas were then current by *tale*, the new ones, as they issued from the mint, were confounded in circulation with the old ones; and, by the association, were depreciated below their intrinsic value, in comparison with bullion. It became, of course, a profitable traffic to sell bullion for coin, to select the light pieces, and re-issue them in currency, and to melt down the heavy ones, and sell them again as bullion. This practice, besides other inconveniences, cost the Government large sums in the renewal of the coins.

But the remainder of the argument stands upon ground far more questionable. It depends upon very numerous and very complex combinations, in which there is infinite latitude for fallacy and error.

The most plausible part of it is that which relates to the course of exchange. Experience in France has shown that the market price of bullion has been influenced by the mint difference between that and coin—sometimes to the full extent of the difference; and it would seem to be a clear inference, that whenever that difference materially exceeded the charges of remitting bullion from the country where it existed, to another in which coinage was free, exchange would be in favor of the former.

If, for instance, the balance of trade between France and England were at any time equal, their merchants would naturally have reciprocal payments to make to an equal amount, which, as usual, would be liquidated by means of bills of exchange. If, in this situation, the difference between coin and bullion should be in the market, as at the mint of France, eight per cent.; if, also, the charges of transporting money from France to England should not be above two per cent.; and if exchange should be at par, it is evident that a profit of six per cent. might be made, by sending bullion from France to England, and drawing bills for the amount. One hundred louis d'ors in coin, would purchase the weight of one hundred and eight in bullion; one hundred of which, remitted to England, would suffice to pay a debt of an equal amount; and two being paid for the charges of insurance and transportation there would remain six for the benefit of the person who should manage the negotiation. But as so large a profit could not fail to produce competition, the bills, in consequence of this, would decrease in price, till the profit was reduced to the *minimum* of an adequate recompense for the trouble and risk. And, as the amount of one hundred louis d'ors in England, might be afforded for ninety-six in France, with a profit of more than one and a half per cent., bills upon England, might fall in France to four per cent. below par; one per cent. being a sufficient profit to the exchanger or broker for the management of the business.

But it is *admitted* that this advantage is lost, when the balance of trade is against the nation which imposes the duty in question; because, by increasing the demand for bullion, it brings this to a par with the coins; and it is to be *suspected*, that where commercial principles have their free scope, and are well understood, the market difference between the metals in coin and bullion, will seldom approximate to that of the mint, if the latter be considerable. It must be not a little difficult to keep the money of the world, which can be employed to an equal purpose in the commerce of the world, in a state of degradation, in comparison with the money of a particular country.

This alone would seem sufficient to prevent it: whenever the price of coin to bullion, in the market, materially exceeded the par of the metals, it would become an object to send the bullion abroad, if not to pay a foreign balance, to be invested in some other way in foreign countries, where it bore a superior value; an operation by which immense fortunes might be amassed, if it were not that the exportation of the bullion would of itself restore the intrinsic par. But, as it would naturally have this effect, the advantage supposed would contain in itself the principle of its own destruction. As long, however, as the exportation of bullion could be made with profit, which is as long as exchange could remain below par, there would be a drain of the gold and silver of the country.

If anything can maintain, for a length of time, a material difference between the value of the metals in coin and in bullion, it must be a constant and considerable balance of trade in favor of the country in which

it is maintained. In one situated like the United States, it would in all probability be a hopeless attempt. The frequent demand for gold and silver, to pay balances to foreigners, would tend powerfully to preserve the equilibrium of intrinsic value.

The prospect is, that it would occasion foreign coins to circulate by common consent, nearly at par with the national.

To say, that as far as the effect of lowering exchange is produced, though it be only occasional and momentary, there is a benefit the more thrown into the scale of public prosperity, is not satisfactory. It has been seen, that it may be productive of one evil, the investment of a part of the national capital in foreign countries; which can hardly be beneficial but in a situation like that of the United Netherlands, where an immense capital, and a decrease of internal demand, render it necessary to find employment for money in the wants of other nations; and, perhaps on a close examination, other evils may be descried.

One allied to that which has been mentioned, is this—taking France, for the sake of more concise illustration, as the scene. Whenever it happens that French louis-d'ors are sent abroad, from whatever cause, if there be a considerable difference between coin and bullion in the market of France, it will constitute an advantageous traffic to send back these louis-d'ors, and bring away bullion in lieu of them; upon all which exchanges, France must sustain an actual loss of a part of its gold and silver.

Again: such a difference between coin and bullion may tend to counteract a favorable balance of trade. Whenever a foreign merchant is the carrier of his own commodities to France for sale, he has a strong inducement to bring back specie, instead of French commodities; because a return in the latter may afford no profit, may even be attended with loss; in the former, it will afford a certain profit. The same principle must be supposed to operate in the general course of remittances from France to other countries. The principal question with a merchant naturally is, in what manner can I realize a given sum, with most advantage, where I wish to place it? And, in cases in which other commodities are not likely to produce equal profit with bullion, it may be expected that this will be preferred; to which, the greater certainty attending the operation must be an additional incitement. There can hardly be imagined a circumstance less friendly to trade, than the existence of an extra inducement arising from the possibility of a profitable speculation upon the articles themselves, to export from a country its gold and silver, rather than the products of its land and labor.

The other advantages supposed, of obliging foreigners to pay dearer for domestic commodities, and to sell their own cheaper, are applied to a situation which includes a favorable balance of trade. It is understood in this sense: the prices of domestic, commodities (such, at least, as are peculiar to the country) remain attached to the denominations of the coins. When a favorable balance of trade realizes in the market the

mint difference between coin and bullion, foreigners, who must pay in the latter, are obliged to give more of it for such commodities than they otherwise would do. Again: the bullion, which is now obtained at a cheaper rate in the home market, will procure the same quantity of goods in the foreign market as before, which is said to render foreign commodities cheaper. In this reasoning, much fallacy is to be suspected. If it be true that foreigners pay more for domestic commodities, it must be equally true that they get more for their own when they bring them themselves to market. If peculiar, or other domestic commodities adhere to the denominations of the coins, no reason occurs why foreign commodities of a like character should not do the same thing; and in this case, the foreigner, though he receive only the same value in coin for his merchandise as formerly, can convert it into a greater quantity of bullion. Whence the nation is liable to lose more of its gold and silver than if their intrinsic value in relation to the coins were preserved. And whether the gain or the loss will, on the whole, preponderate, would appear to depend on the comparative proportion of active commerce of the one country with the other.

It is evident, also, that the nation must pay as much gold and silver as before, for the commodities which it procures *abroad;* and whether it obtains this gold and silver cheaper, or not, turns upon the solution of the question just intimated, respecting the relative proportion of active commerce between the two countries.

Besides these considerations, it is admitted in the reasoning, that the advantages supposed, which depend on a favorable balance of trade, have a tendency to affect that balance disadvantageously. Foreigners, it is allowed, will in this case seek some other vent for their commodities, and some other market where they can supply their wants at an easier rate. A tendency of this kind, if real, would be a sufficient objection to the regulation. Nothing which contributes to change a beneficial current of trade, can well compensate, by particular advantages, for so injurious an effect. It is far more easy to transfer trade from a less to a more favorable channel, than, when once transferred, to bring it back to its old one. Every source of artificial interruption to an advantageous current, is, therefore, cautiously to be avoided.

It merits attention, that the able minister, who lately and so long presided over the finances of France, does not attribute to the duty of coinage in that country, any particular advantages in relation to exchange and trade. Though he rather appears an advocate for it, it is on the sole ground of the revenue it affords, which he represents as in the nature of a very moderate duty on the general mass of exportation.

And it is not improbable that, to the singular felicity of situation of that kingdom, is to be attributed its not having been sensible of the evils which seem incident to the regulation. There is, perhaps, no part of Europe which has so little need of other countries as France. Comprehending a variety of soils and climates, an immense population, its

agriculture in a state of mature improvement, it possesses within its own bosom, most, if not all, the productions of the earth, which any of its most favored neighbors can boast. The variety, abundance, and excellence of its wines, constitute a peculiar advantage in its favor. Arts and manufactures are there also in a very advanced state; some of them, of considerable importance, in higher perfection than elsewhere. Its contiguity to Spain; the intimate nature of its connexion with that country; a country with few fabrics of its own, consequently numerous wants, and the principal receptacle of the treasures of the new world: These circumstances concur, in securing to France so uniform and so considerable a balance of trade, as in a great measure to counteract the natural tendency of any errors which may exist in the system of her mint; and to render inferences from the operation of that system there, in reference to this country, more liable to mislead than to instruct. Nor ought it to pass unnoticed, that, with all these advantages, the government of France has found it necessary, on some occasions, to employ very violent methods to compel the bringing of bullion to the mint; a circumstance which affords a strong presumption of the inexpediency of the regulation, and of the impracticability of executing it in the United States.

This point has been the longer dwelt upon, not only because there is a diversity of opinion among speculative men concerning it, and a diversity in the practice of the most considerable commercial nations, but because the acts of our own government, under the confederation, have not only admitted the expediency of defraying the expense of coinage out of the metals themselves, but upon this idea have both made a deduction from the weight of the coins, and established a difference between their regulated value and the mint price of bullion, greater than would result from that deduction. This double operation in favor of a principle so questionable in itself, has made a more particular investigation of it a duty.

The intention, however, of the preceding remarks, is rather to show that the expectation of commercial advantages ought not to decide in favor of a duty of coinage, and that, if it should be adopted, it ought not to be in the form of a deduction from the intrinsic value of the coins, than absolutely to exclude the idea of any difference whatever between the value of the metals in coin and in bullion. It is not clearly discerned that a small difference between the mint price of bullion, and the regulated value of the coins, would be pernicious, or that it might not even be advisable, in the first instance, by way of experiment, merely as a preventive to the melting down and exportation of the coins. This will now be somewhat more particularly considered.

The arguments for a coinage entirely free, are, that it preserves the intrinsic value of the metals; that it makes the expense of fabrication a general instead of a partial tax; and that it tends to promote the abundance of gold and silver, which, it is alleged, will flow to that place

where they find the best price, and from that place where they are in any degree undervalued.

The first consideration has not much weight, as an objection to a plan which, without diminishing the quantity of metals in the coins, merely allows a less price for them in bullion at the national factory or mint. No rule of intrinsic value is violated, by considering the raw material as worth less than the fabric, in proportion to the expense of fabrication. And by divesting foreign coins of the privilege of circulating as money, they become the raw material.

The second consideration has perhaps greater weight. But it may not amount to an objection, if it be the best method of preventing disorders in the coins, which it is in a particular manner the interest of those on whom the tax would fall to prevent. The practice of taking gold by weight, which has of late years obtained in Great Britain, has been found, in some degree, a remedy; but this is inconvenient, and may on that account fall into disuse. Another circumstance has had a remedial operation. This is the delays of the mint. It appears to be the practice there, not to make payment for the bullion which is brought to be exchanged for coin, till it either has in fact, or is pretended to have, undergone the process of recoining.

The necessity of fulfilling prior engagements is a cause or pretext for postponing the delivery of the coin in lieu of the bullion. And this delay creates a difference in the market price of the two things. Accordingly, for some years past, an ounce of standard gold, which is worth in coin £3 17*s.* 10½*d.* sterling, has been in the market of London, in bullion, only £3 17*s.* 6*d.*, which is within a small fraction of one-half per cent. less. Whether this be management in the mint, to accommodate the bank in the purchase of bullion, or to effect indirectly something equivalent to a formal difference of price, or whether it be the natural course of the business, is open to conjecture.

It at the same time indicates that if the mint were to make prompt payment, at about half per cent. less than it does at present, the state of bullion, in respect to coin, would be precisely the same as it now is. And it would be then certain that the Government would save expense in the coinage of gold; since it is not probable that the time actually lost in the course of the year, in converting bullion into coin, can be an equivalent to half per cent. on the advance, and there will generally be at the command of the Treasury a considerable sum of money waiting for some periodical disbursement, which, without hazard, might be applied to that advance.

In what sense a free coinage can be said to promote the abundance of gold and silver, may be inferred from the instances which have been given of the tendency of a contrary system to promote their exportation. It is, however, not probable, that a very small difference of value between coin and bullion can have any effect which ought to enter into calculation. There can be no inducement of positive profit, to export

the bullion, as long as the difference of price is exceeded by the expense of transportation. And the prospect of smaller loss upon the metals than upon commodities, when the difference is very minute, will be frequently overbalanced by the possibility of doing better with the latter, from a rise of markets. It is, at any rate, certain, that it can be of no consequence in this view, whether the superiority of coin to bullion in the market, be produced, as in England, by the delay of the mint, or by a formal discrimination in the regulated values.

Under an impression that a *small* difference between the value of the coin and the mint price of bullion, is the least exceptionable expedient for restraining the melting down, or exportation of the former, and not perceiving that, if it be a very moderate one, it can be hurtful in other respects—the Secretary is inclined to an experiment of one half per cent. on each of the metals. The fact which has been mentioned, with regard to the price of gold bullion in the English market, seems to demonstrate that such a difference may safely be made. In this case, there must be immediate payment for the gold and silver offered to the mint. How far one half per cent. will go towards defraying the expense of the coinage, cannot be determined beforehand with accuracy. It is presumed that, on an economical plan, it will suffice in relation to gold. But it is not expected that the same rate on silver will be sufficient to defray the expense attending that metal. Some additional provision may therefore be found necessary, if this limit be adopted.

It does not seem to be advisable to make any greater difference in regard to silver than to gold; because it is desirable that the proportion between the two metals in the market, should correspond with that in the coins, which would not be the case if the mint price of one was comparatively lower than that of the other; and because, also, silver being proposed to be rated in respect to gold, somewhat below its general commercial value, if there should be a disparity to its disadvantage in the mint prices of the two metals, it would obstruct too much the bringing of it to be coined, and would add an inducement to export it. Nor does it appear to the Secretary safe to make a greater difference between the value of coin and bullion, than has been mentioned. It will be better to have to increase it hereafter, if this shall be found expedient, than to have to recede from too considerable a difference, in consequence of evils which shall have been experienced.

It is sometimes mentioned, as an expedient, which, consistently with a free coinage, may serve to prevent the evils desired to be avoided, to incorporate in the coins a greater proportion of alloy than is usual; regulating their value, nevertheless, according to the quantity of pure metal they contain. This, it is supposed, by adding to the difficulty of refining them, would cause bullion to be preferred both for manufacture and exportation.

But strong objections lie against this scheme:—an augmentation of expense; an actual depreciation of the coin; a danger of still greater

depreciation in the public opinion; the facilitating of counterfeits; while it is questionable whether it would have the effect expected from it.

The alloy being esteemed of no value, an increase of it is evidently an increase of expense. .This, in relation to the gold coins, particularly, is a matter of moment. It has been noted, that the alloy in them consists partly of silver. If, to avoid expense, the addition should be of copper only, this would spoil the appearance of the coin, and give it a base countenance. Its beauty would, indeed, be injured, though in a less degree, even if the usual proportions of silver and copper should be maintained in the increased quantity of alloy.

And however inconsiderable an additional expenditure of copper in the coinage of a year may be deemed, in a series of years it would become of consequence. In regulations which contemplate the lapse and operation of ages, a very small item of expense acquires importance.

The actual depreciation of the coin by an increase of alloy, results from the very circumstance which is the motive to it—the greater difficulty of refining. In England, it is customary for those concerned in manufactures of gold to make a deduction in the price of four pence sterling per ounce, of fine gold, for every carat which the mass containing it is below the legal standard. Taking this as a rule, an inferiority of a single carat, or one twenty-fourth part in the gold coins of the United States, compared with the English standard, would cause the *same quantity* of pure gold in them to be worth nearly four-tenths per cent. less than in the coins of Great Britain. This circumstance would be likely, in process of time, to be felt in the market of the United States.

A still greater depreciation, in the public opinion, would be to be apprehended from the *apparent* debasement of the coin. The effects of imagination and prejudice cannot safely be disregarded in anything that relates to money. If the beauty of the coin be impaired, it may be found difficult to satisfy the generality of the community that what appears worst is not really less valuable; and it is not altogether certain that an impression of its being so may not occasion an unnatural augmentation of prices.

Greater danger of imposition, by counterfeits, is also to be apprehended from the injury which will be done to the appearance of the coin. It is a just observation, that "the perfection of the coins is a great safeguard against counterfeits." And it is evident that the color, as well as the excellence of the workmanship, is an ingredient in that perfection. The intermixture of too much alloy, particularly of copper, in the gold coins at least, must materially lessen the facility of distinguishing, by the eye, the purer from the baser kind, the genuine from the counterfeit.

The inefficacy of the arrangement to the purpose intended to be answered by it, is rendered probable by different considerations. If the standard of plate in the United States should be regulated according to that of the national coins, it is to be expected that the goldsmith would prefer these to the foreign coins, because he would find them prepared

to his hand, in the state which he desires; whereas he would have to *expend* an additional quantity of alloy to bring the foreign coins to that state. If the standard of plate, by law or usage, should be superior to that of the national coins, there would be a possibility of the foreign coins bearing a higher price in the market; and this would not only obstruct their being brought to the mint, but might occasion the exportation of the national coin in preference. It is not understood that the practice of making an abatement of price for the inferiority of standard is applicable to the English mint; and if it be not, this would also contribute to frustrating the expected effect from the increase of alloy. For, in this case, a given quantity of pure metal, in our standard, would be worth as much there as in bullion of the English or any other standard.

Considering, therefore, the uncertainty of the success of the expedient, and the inconveniences which seem incident to it, it would appear preferable to submit to those of a free coinage. It is observable, that additional expense, which is one of the principal of these, is also applicable to the proposed remedy.

It is now proper to resume and finish the answer to the first question, in order to which the three succeeding ones have necessarily been anticipated. The conclusion to be drawn from the observations which have been made on the subject, is this: That the unit, in the coins of the United States, ought to correspond with 24 grains and $\frac{8}{9}$ of a grain of pure gold, and with 371 grains and $\frac{1}{4}$ of a grain of pure silver, each answering to a dollar in the money of account. The former is exactly agreeable to the present value of gold, and the latter is within a small fraction of the mean of the two last emissions of dollars—the only ones which are now found in common circulation, and of which the newest is in the greatest abundance. The alloy in each case to be one-twelfth of the total weight, which will make the unit 27 grains of standard gold, and 405 grains of standard silver.

Each of these, it has been remarked, will answer to a dollar in the money of account. It is conceived that nothing better can be done in relation to this, than to pursue the track marked out by the resolution of the 8th of August, 1786. This has been approved abroad, as well as at home, and it is certain that nothing can be more simple or convenient, than the decimal subdivisions. There is every reason to expect that the method will speedily grow into general use, when it shall be seconded by corresponding coins. On this plan, the unit in the money of account will continue to be, as established by that resolution, a dollar; and its multiples, dimes, cents, and mills, or tenths, hundredths, and thousandths.

With regard to the number of different pieces which shall compose the coins of the United States, two things are to be consulted—convenience of circulation, and cheapness of the coinage. The first ought not to be sacrificed to the last; but as far as they can be reconciled to each other, it is desirable to do it. Numerous and small (if not too minute) subdivisions assist circulation; but the multiplication of the smaller kinds in-

creases expense; the same process being necessary to a small as to a large piece.

As it is easy to add, it will be most adviseable to begin with a small number, till experience shall decide whether any other kinds are necessary. The following, it is conceived, will be sufficient in the commencement:

One gold piece, equal in weight and value to ten units or dollars.

One gold piece, equal to a tenth part of the former, and which shall be a unit or dollar.

One silver piece, which shall also be a unit or dollar.

One silver piece, which shall be, in weight and value, a tenth part of the silver unit or dollar.

One copper piece, which shall be of the value of a hundredth part of a dollar.

One other copper piece, which shall be half the value of the former.

It is not proposed that the lightest of the two gold coins should be numerous, as, in large payments, the larger the pieces the shorter the process of counting, the less risk of mistake, and, consequently, the greater the safety and the convenience; and, in small payments, it is not perceived that any inconvenience can accrue from an entire dependance on the silver and copper coins. The chief inducement to the establishment of the small gold piece, is to have a sensible object in that metal, as well as in silver, to express the unit. Fifty thousand at a time in circulation may suffice for this purpose.

The tenth part of a dollar is but a small piece, and, with the aid of the copper coins, will probably suffice for all the more minute uses of circulation. It is less than the least of the silver coins now in general currency in England.

The largest copper piece will nearly answer to the half-penny sterling, and the smallest, of course, to the farthing. Pieces of very small value are a great accommodation, and the means of a beneficial economy to the poor, by enabling them to purchase, in small portions, and at a more reasonable rate, the necessaries of which they stand in need. If there are only cents, the lowest price for any portion of a vendible commodity, however inconsiderable in quantity, will be a cent; if there are half cents, it will be a half-cent; and, in a great number of cases, exactly the same things will be sold for a half-cent which, if there were none, would cost a cent. But a half-cent is low enough for the *minimum* of price. Excessive minuteness would defeat its object. To enable the poorer classes to procure necessaries cheap, is to enable them, with more comfort to themselves, to labor for less; the advantages of which need no comment.

The denominations of the silver coins contained in the resolution of the 8th of August, 1786, are conceived to be significant and proper. The dollar is recommended by its correspondency with the present coin of that name, for which it is designed to be a substitute, which will facilitate its ready adoption as such in the minds of the citizens. The

dime, or tenth, the cent, or hundredth, the mill, or thousandth, are proper, because they express the proportions which they are intended to designate. It is only to be regretted that the meaning of these terms will not be familiar to those who are not acquainted with the language from which they are borrowed. It were to be wished that the length, and, in some degree, the clumsiness, of some of the corresponding terms in English did not discourage from preferring them. It is useful to have names which signify the things to which they belong; and, in respect to objects of general use, in a manner intelligible to all. Perhaps it might be an improvement to let the dollar have the appellation either of dollar or unit, (which last will be the most significant,) and to substitute "tenth" for dime. In time, the unit may succeed to the dollar. The word "cent," being in use in various transactions and instruments, will, without much difficulty, be understood as the hundredth; and the half-cent, of course, as the two hundredth part.

The eagle is not a very expressive or apt appellation for the largest gold piece; but nothing better occurs. The smallest of the two gold coins may be called the dollar or unit, in common with the silver piece, with which it coincides.

The volume or size of each piece is a matter of more consequence than its denomination. It is evident that the more superficies or surface, the more the piece will be liable to be injured by friction; or, in other words, the faster it will wear. For this reason, it is desirable to render the thickness as great, in proportion to the breadth, as may consist with neatness and good appearance. Hence, the form of the double guinea, or double louis-d'or, is preferable to that of the half johannes for the large gold piece. The small one cannot well be of any other size than the Portuguese piece of eight, of the same metal.

As it is of consequence to fortify the idea of the identity of the dollar, it may be best to let the form and size of the new one, as far as the quantity of matter (the alloy being less) permits, agree with the form and size of the present. The diameter may be the same.

The tenths may be in a mean between the Spanish $\frac{1}{8}$ and $\frac{1}{16}$ of a dollar.

The copper coins may be formed merely with a view to good appearance, as any difference in the wearing that can result from difference of form, can be of little consequence in reference to that metal.

It is conceived that the weight of the cent may be eleven pennyweight; which will about correspond with the value of the copper and the expense of coinage. This will be to conform to the rule of intrinsic value, as far as regard to the convenient size of the coins will permit; and the deduction of the expense of coinage in this case will be the more proper, as the copper coins, which have been current hitherto, have passed till lately for much more than their intrinsic value. Taking the weight as has been suggested, the size of the cent may be nearly that of the piece herewith transmitted, which weighs 10dwt. 11grs. 10m.

Two-thirds of the diameter of the cent will suffice for the diameter of the half cent.

It may, perhaps, be thought expedient, according to general practice, to make the copper coinage an object of profit; but where this is done to any considerable extent, it is hardly possible to have effectual security against counterfeits. This consideration, concurring with the soundness of the principle of preserving the intrinsic value of the money of a country, seems to outweigh the consideration of profit.

The foregoing suggestions, respecting the sizes of the several coins, are made on the supposition that the legislature may think fit to regulate this matter. Perhaps, however, it may be judged not unadviseable to leave it to executive discretion.

With regard to the proposed size of the cent, it is to be confessed, that it is rather greater than might be wished, if it could with propriety and safety be made less: and should the value of copper continue to decline, as it has done for some time past, it is very questionable whether it will long remain alone a fit metal for money. This has led to a consideration of the expediency of uniting a small proportion of silver with the copper, in order to be able to lessen the bulk of the inferior coins. For this, there are precedents in several parts of Europe. In France, the composition which is called billion, has consisted of one part silver and four parts copper; according to which proportion, a cent might contain seventeen grains, defraying out of the material the expense of coinage. The conveniency of size is a recommendation of such a species of coin; but the Secretary is deterred from proposing it, by the apprehension of counterfeits. The effect of so small a quantity of silver, in comparatively so large a quantity of copper, could easily be imitated by a mixture of other metals of little value, and the temptation to doing it would not be inconsiderable.

The devices of the coins are far from being matters of indifference, as they may be made the vehicles of useful impressions. They ought, therefore, to be emblematical, but without losing sight of simplicity. The fewer sharp points and angles there are, the less will be the loss by wearing. The Secretary thinks it best, on this head, to confine himself to these concise and general remarks.

The last point to be discussed, respects the currency of foreign coins.

The abolition of this, in proper season, is a necessary part of the system contemplated for the national coinage. But this it will be expedient to defer, till some considerable progress has been made in preparing substitutes for them. A gradation may, therefore, be found most convenient.

The foreign coins may be suffered to circulate, precisely upon their present footing, for one year after the mint shall have commenced its operations. The privilege may then be continued for another year, to the gold coins of Portugal, England, and France, and to the silver coins of Spain. And these may still be permitted to be current for one year

more, at the rates allowed to be given for them at the mint; after the expiration of which, the circulation of all foreign coins to cease.

The moneys which will be paid into the Treasury during the first year, being re-coined before they are issued anew, will afford a partial substitute, before any interruption is given to the pre-existing supplies of circulation. The revenues of the succeeding year, and the coins which will be brought to the mint, in consequence of the discontinuance of their currency, will materially extend the substitute in the course of that year; and its extension will be so far increased, during the third year, by the facility of procuring the remaining species to be re-coined, which will arise from the diminution of their current values, as probably to enable the dispensing wholly with the circulation of the foreign coins after that period. The progress which the currency of bank bills will be likely to have made, during the same time, will also afford a substitute of another kind.

This arrangement, besides avoiding a sudden stagnation of circulation, will cause a considerable proportion of whatever loss may be incident to the establishment, in the first instance, to fall, as it ought to do, upon the Government, and will probably tend to distribute the remainder of it more equally among the community.

It may, nevertheless, be advisable, in addition to the precautions here suggested, to repose a discretionary authority in the President of the United States to continue the currency of the Spanish dollar, at a value corresponding with the quantity of fine silver contained in it, beyond the period above mentioned, for the cessation of the circulation of the foreign coins. It is possible that an exception in favor of this particular species of coin may be found expedient; and it may tend to obviate inconveniences, if there be a power to make the exception, in a capacity to be exerted when the period shall arrive.

The Secretary for the Department of State, in his report to the House of Representatives, on the subject of establishing a uniformity in the weights, measures, and coins of the United States, has proposed that the weight of the dollar should correspond with the unit of weight. This was done on the supposition that it would require but a very small addition to the quantity of metal which the dollar, independently of the object he had in view, ought to contain; in which he was guided by the resolution of the 8th of August, 1786, fixing the dollar at 375 grains and 64 hundredths of a grain.

Taking this as the proper standard of the dollar, a small alteration, for the sake of incorporating so systematic an idea, would appear desirable. But, if the principles which have been reasoned from, in this report, are just, the execution of that idea becomes more difficult. It would certainly not be advisable to make, on that account, so considerable a change in the money unit, as would be produced by the addition of five grains of silver to the proper weight of the dollar, without a proportional augmentation of its relative value; and to make such an

augmentation would be to abandon the advantage of preserving the identity of the dollar, or to speak more accurately, of having the proposed one received and considered as a mere substitute for the present.

The end may, however, be obtained, without either of these inconveniences, by increasing the proportion of alloy in the silver coins. But this would destroy the uniformity, in that respect, between the gold and silver coins. It remains, therefore, to elect which of the two systematic ideas shall be pursued or relinquished; and it may be remarked, that it will be more easy to convert the present silver coins into the proposed ones, if these last have the same, or nearly the same proportion of alloy, than if they have less.

The organization of the Mint, yet remains to be considered.

This relates to the persons to be employed, and to the services which they are respectively to perform. It is conceived that there ought to be—

A Director of the Mint; to have the general superintendence of the business.

An Assay Master, or Assayer; to receive the metals brought to the Mint, ascertain their fineness, and deliver them to be coined.

A Master Coiner; to conduct the making of the coins.

A Cashier; to receive and pay them out.

An Auditor; to keep and adjust the accounts of the Mint.

Clerks; as many as the Directors of the Mint shall deem necessary, to assist the different officers.

Workmen; as many as may be found requisite.

A Porter.

In several of the European Mints, there are various other officers, but the foregoing are those only who appear to be indispensable. Persons in the capacity of clerks, will suffice instead of the others, with the advantage of greater economy.

The number of workmen is left indefinite, because, at certain times, it is requisite to have more than at others. They will, however, never be numerous. The expense of the establishment, in an ordinary year, will probably be from fifteen to twenty thousand dollars.

The remedy for errors in the weight and alloy of the coins, must necessarily form a part, in the system of a mint; and the manner of applying it will require to be regulated. The following account is given of the practice in England, in this particular:

A certain number of pieces are taken promiscuously out of every fifteen pounds of gold, coined at the Mint, which are deposited, for safe keeping, in a strong box, called the pix. This box, from time to time, is opened in the presence of the Lord Chancellor, the officers of the Treasury, and others, and portions are selected from the pieces of each coinage, which are melted together, and the mass assayed by a jury of the Company of Goldsmiths. If the imperfection and deficiency, both in fineness and weight, fall short of a sixth of a carat, or 40 grains of pure gold, upon a pound of standard, the master of the Mint is held

excusable; because, it is supposed, that no workman can reasonably be answerable for greater exactness. The expediency of some similar regulation seems to be manifest.

All which is humbly submitted.

ALEXANDER HAMILTON,
Secretary of the Treasury.

HAMILTON'S SELECTION OF THE RATIO OF 15; CONTINUED FROM PAGE 460.

(From Thomas H. Benton's speech on the Revival of the Gold Currency. Thirty Years' View, Vol. I, Chap. CV.)

The following is the passage in which Mr. Benton makes the charge analyzed and rejected in advance by Hamilton:

3. In the third place, Mr. B. undertook to affirm, as a proposition free from dispute or contestation, that the value now set upon gold, by the laws of the United States, was unjust and erroneous; that these laws had expelled gold from circulation; and that it was the bounden duty of Congress to restore that coin to circulation, by restoring it to its just value.

That gold was undervalued by the laws of the United States, and expelled from circulation, was a fact, Mr. B. said, which everybody knew; but there was something else which everybody did not know; which few, in reality, had an opportunity of knowing, but which was necessary to be known, to enable the friends of gold to go to work at the right place to effect the recovery of that precious metal which their fathers once possessed—which the subjects of European Kings now possess—which the citizens of the young republics to the South all possess—which even the free negroes of San Domingo possess—but which the yeomanry of this America have been deprived of for more than twenty years, and will be deprived of forever, unless they discover the cause of the evil, and apply the remedy to its root.

I have already shown, said Mr. B., that the plan for the support of public credit which General Hamilton brought forward, in 1791, was a plan for the establishment of the paper system in our America. We had at that time a gold currency which was circulating freely and fully all over the country. Gold was the antagonist of paper, and, with fair play, will keep a paper currency within just and proper limits. It will keep down the small notes; for, no man will carry a five, a ten, or a twenty dollar note in his pocket, when he can get guineas, eagles, half eagles, doubloons, and half joes to carry in their place. The notes of the new Bank of the United States, which bank formed the leading feature in the plan for the support of public credit, had already derived one undue advantage over gold, in being put on a level with it in point of legal tender to the federal government, and universal receivability in all payments to that government: they were now to derive another, and a still greater undue advantage over gold, in the law for the establishment of the national mint; an institution which also formed a feature of the plan for the support of public credit. It is to that plan that we trace the origin of the erroneous valuation of gold, which has banished that metal from the country. Mr. Secretary Hamilton, in his proposition for the establishment of a mint, recommended that the relative value of gold to silver should be fixed at fifteen for one; and that recommendation became the law of the land; and has remained so ever since. At the same time, the relative value of these metals in Spain and Portugal, and throughout their vast dominions in the New World, whence our principal supplies of gold were derived, was at the rate of sixteen for one; thus making our standard six per cent. below the standard of the

countries which chiefly produced gold. It was also below the English standard, and the French standard, and below the standard which prevailed in these States, before the adoption of the Constitution, and which was actually prevailing in the States, at the time that this new proposition of fifteen to one was established.

Mr. B. was ready to admit that there was some nicety requisite in adjusting the relative value of two different kinds of money—gold and silver for example—so as to preserve an exact equipoise between them, and to prevent either from expelling the other. There was some nicety, but no insuperable or even extraordinary difficulty, in making the adjustment. The nicety of the question was aggravated in the year '92, by the difficulty of obtaining exact knowledge of the relative value of these metals, at that time, in France and England; and Mr. Gallatin has since shown that the information which was then relied upon was clearly erroneous. The consequence of any mistake in fixing our standard, was also well known in the year '92. Mr. Secretary Hamilton, in his proposition for the establishment of a mint, expressly declared that the consequence of a mistake in the relative value of the two metals, would be the expulsion of the one that was undervalued. Mr. Jefferson, then Secretary of State, in his contemporaneous report upon foreign coins, declared the same thing. Mr. Robert Morris, financier to the revolutionary government, in his proposal to establish a mint, in 1782, was equally explicit to the same effect. The delicacy of the question and the consequence of a mistake, were then fully understood forty years ago, when the relative value of gold and silver was fixed at fifteen to one. But, at that time, it unfortunately happened that the paper system, then omnipotent in England, was making its transit to our America; and everything that would go to establish that system—everything that would go to sustain the new-born Bank of the United States—that eldest daughter and *spem gregis* of the paper system in America—fell in with the prevailing current, and became incorporated in the federal legislation of the day. Gold, it is well known, was the antagonist of paper; from its intrinsic value, the natural predilection of all mankind for it, its small bulk, and the facility of carrying it about, it would be preferred to paper, either for travelling or keeping in the house; and thus would limit and circumscribe the general circulation of bank notes, and prevent all plea of necessity for issuing smaller notes. Silver, on the contrary, from its inconvenience of transportation, would favor the circulation of bank notes. Hence the birth of the doctrine, that if a mistake was to be committed, it should be on the side of silver! Mr. Secretary Hamilton declares the existence of this feeling when, in his report upon the establishment of a mint, he says: "It is sometimes observed, that silver ought to be encouraged, rather than gold, as being more conducive to the extension of bank circulation, from the greater difficulty and inconvenience which its greater bulk, compared with its value, occasions in the transportation of it." This passage in the Secretary's report, proves the existence of the feeling in favor of silver against gold, and the cause of that feeling. Quotations might be made from the speeches of others to show that they acted upon that feeling; but it is due to General Hamilton to say that he disclaimed such a motive for himself, and expressed a desire to retain both metals in circulation, and even to have a gold dollar.

The proportion of fifteen to one was established. The 11th section of the act of April, 1792, enacted that every fifteen pounds weight of pure silver, should be equal in value, in all payments, with one pound of pure gold; and so in proportion for less quantities of the respective metals. This act was the death warrant to the gold currency. The diminished circulation of that coin soon began to be observable; but it was not immediately extinguished. Several circumstances delayed, but could not prevent that catastrophe.

1. The Bank of the United States then issued no note of less denomination than ten dollars, and but few of them. 2. There were but three other banks in the United States, and they issued but few small notes; so that a small note currency did not come directly into conflict with gold. 3. The trade to the lower Mississippi continued to bring up from Natchez and New Orleans, for many years, a large supply of doubloons; and long supplied a gold currency to the new States in the West. Thus, the absence

of a small note currency, and the constant arrivals of doubloons from the lower Mississippi, deferred the fate of the gold currency; and it was not until the lapse of near twenty years after the adoption of the erroneous standard of 1792, that the circulation of that metal, both foreign and domestic, became completely and totally extinguished in the United States. The extinction is now complete, and must remain so until the laws are altered.

[From Jefferson's Works, vol. iii, p. 330.]

Mr. Jefferson to Col. Hamilton.

FEBRUARY — 1792.

DEAR SIR: I return you the report on the mint, which I have read over with a great deal of satisfaction. I concur with you in thinking that the unit must stand on both metals, that the alloy should be the same in both, also in the proportion you establish between the value of the two metals. As to the question on whom the expense of coinage is to fall, I have been so little able to make up an opinion satisfactory to myself as to be ready to concur in either decision. With respect to the dollar, it must be admitted by all the world, that there is great incertainty in the meaning of the term, and therefore all the world will have justified Congress for their first act of removing the incertainty by declaring what they understand by the term, but the incertainty once removed, exists no longer, and I very much doubt a right now to change the value and especially to lessen it. It would lead to so easy a mode of paying off their debts. Besides, the parties injured by this reduction of the value would have so much matter to urge in support of the first point of fixation. Should it be thought, however, that Congress may reduce the value of the dollar, I should be for adopting for our unit, instead of the dollar, either one ounce of pure silver, or one ounce of standard silver, so as to keep the unit of money a part of the system of measures, weights and coins. I hazard these thoughts to you extempore, and am, dear sir, respectfully and affectionately.

EXTRACT FROM THE REPORT UPON WEIGHTS AND MEASURES, BY JOHN QUINCY ADAMS, SECRETARY OF STATE OF THE UNITED STATES.

(PREPARED IN OBEDIENCE TO A RESOLUTION OF THE SENATE OF THE THIRD MARCH, 1817.)

PHILADELPHIA: 1821.

[From page 90.]

To despair of human improvement is not more congenial to the judgment of sound philosophy than to the temper of brotherly kindness. Uniformity of weights and measures is, and has been for ages, the common, earnest, and anxious pursuit of France, of Great Britain, and, since their independent existence, of the United States. To the attainment of one object, common to them all, they have been proceeding by different means, and with different ultimate ends. France alone has proposed a plan suitable to the ends of all; and has invited co-operation for its construction and establishment. The associated pursuit of great objects of common interest is among the most powerful modern expedients for the improvement of man. The principle is at this time in full operation, for the abolition of the African slave-trade. What reason can be assigned, why other objects, of common interest to the whole species, should not be in like manner made the subject of common deliberation and concerted effort? To promote the intercourse of nations with each other, the uniformity of their weights and measures is among the most efficacious agencies: and this uniformity can be effected only by mutual understanding and united energy. A single and universal system can be finally established only by a general convention, to which the principal nations of the world shall be parties, and to which they shall all give their assent. To effect this, would seem to be no difficult achievement.

It has one advantage over every plan of moral or political improvement, not excepting the abolition of the slave-trade itself: there neither is, nor can be, any great counteracting *interest* to overcome. The conquest to be obtained is merely over prejudices, usages, and perhaps national jealousies. The whole evil to be subdued is diversity of opinion with regard to the means of attaining the same end. To the formation of the French system, the learning and the genius of other nations did co-operate with those of her native sons. The co-operation of Great Britain was invited; and there is no doubt that of the United States would have been accepted, had it been offered. The French system embraces all the great and important principles of uniformity, which can be applied to weights and measures: but that system is not yet complete. It is susceptible of many modifications and improvements. Considered merely as a labor-saving machine, it is a new power, offered to man, incomparably greater than that which he has acquired by the new agency which he has given to steam. It is in design the greatest *invention* of human ingenuity since that of printing. But, like that, and every other useful and complicated invention, it could not be struck out perfect at a heat. Time and experience have already dictated many improvements of its mechanism; and others may, and undoubtedly will, be found necessary for it hereafter. But all the radical principles of uniformity are in the machine: and the more universally it shall be adopted, the more certain will it be of attaining all the perfection which is within the reach of human power.

Another motive, which would seem to facilitate this concert of nations, is, that it conceals no lurking danger to the independence of any of them. It needs no convocation of sovereigns, armed with military power. It opens no avenue to partial combinations and intrigues. It can mask, under the vizor of virtue, no project of avarice or ambition. It can disguise no private or perverted ends, under the varnish of generous and benevolent aims. It has no final appeal to physical force; no *ultima ratio* of cannon balls. Its objects are not only pacific in their nature, but can be pursued by no other than peaceable means. Would it not be strange, if, while mankind find it so easy to attain uniformity in the use of every engine adapted to their mutual destruction, they should find it impracticable to agree upon the few and simple but indispensable instruments of all their intercourse of peace and friendship and beneficence—that they should use the same artillery and musketry, and bayonets and swords and lances, for the wholesale trade of human slaughter, and that they should refuse to weigh by the same pound, to measure by the same rule, to drink from the same cup, to use in fine the same materials for ministering to the wants and contributing to the enjoyments of one another?

These views are presented as leading to the conclusion, that, as final and universal uniformity of weights and measures is the common desideratum for all civilized nations; as France has formed, and for her own

use has established, a system, adapted, by the highest efforts of human science, ingenuity, and skill, to the common purposes of all; as this system is yet new, imperfect, susceptible of great improvements, and struggling for existence even in the country which gave it birth; as its universal establishment would be a universal blessing; and as, if ever effected, it can only be by consent, and not by force, in which the energies of opinion must precede those of legislation; it would be worthy of the dignity of the Congress of the United States to consult the opinions of all the civilized nations with whom they have a friendly intercourse; to ascertain, with the utmost attainable accuracy, the existing state of their respective weights and measures; to take up and pursue, with steady, persevering, but always temperate and discreet exertions, the idea conceived, and thus far executed, by France, and to co-operate with her to the final and universal establishment of her system.

But, although it is respectfully proposed that Congress should immediately sanction this consultation, and that it should commence, in the first instance, with Great Britain and France, it is not expected that it will be attended with immediate success. Ardent as the pursuit of uniformity has been for ages in England, the idea of extending it beyond the British dominions has hitherto received but little countenance there. The operation of changes of opinion there is slow; the aversion to all innovations, deep. More than two hundred years had elapsed from the Gregorian reformation of the calendar, before it was adopted in England. It is to this day still rejected throughout the Russian empire. It is not even intended to propose the adoption by ourselves of the French metrology for the present. The reasons have been given for believing, that the time is not yet matured for this reformation. Much less is it supposed adviseable to propose its adoption to any other nation. But, in consulting them, it will be proper to let them understand, that the design and motive of opening the communication is, to promote the final establishment of a system of weights and measures, to be common to all civilized nations.

In contemplating so great, but so beneficial a change, as the ultimate object of the proposal now submitted to the consideration of Congress, it is supposed to be most congenial to the end, to attempt no present change whatever in our existing weights and measures; to let the standards remain precisely as they are; and to confine the proceedings of Congress at this time to authorizing the Executive to open these communications with the European nations where we have accredited ministers and agents, and to such declaratory enactments and regulations as may secure a more perfect uniformity in the weights and measures now in use throughout the Union.

[From page 124.]

Weights and measures, and the final establishment of a system for them, with a view to the utmost practicable extent of uniformity, are

at this moment under the deliberative consideration of four populous and commercial nations—Great Britain, France, Spain, and the United States. The interest is common to them all: the object of *uniformity* is the same to all. Could they agree upon one result, the advantages of that agreement would be great to each of them separately, and still greater in all their intercourse with one another. But this agreement can be obtained only by consultation and concert. It is, therefore, respectfully proposed, as the foundation of proceedings necessary for securing ultimately to the United States a system of weights and measures which shall be common to all civilized nations, that the President of the United States be requested to communicate, through the ministers of the United States, in France, Spain, and Great Britain, with the governments of those nations, upon the subject of weights and measures, with reference to the principle of uniformity as applicable to them. It is not contemplated by this proposal, that the communication should lead to any conventional stipulations or treaties; but it is hoped that the comparison of ideas, and the mutual reciprocation of observation and reflection, may terminate in concurrent acts, by which, if even universal uniformity should be found impracticable, that which would be obtained by each nation would at least approximate nearer to prefection.

APPENDIX C.

Note, on the proportional value of the pound sterling and the dollar.

The whole amount of the commercial intercourse between two countries, within a given time, say a year, may be considered as the barter of an equivalent portion of their respective productions. The balance of trade is the excess of exportation from the one, and of importation to the other, beyond the equivalent value of specific articles of the trade.

In the practice of commerce, all the articles of the trade are valued in the established currencies of both countries; each article first in the country from which it is exported, and secondly in that to which it is imported. The balance of the trade must be discharged by some article of equal agreed value to both parties. There are two precious metals *gold* and *silver*, which, by the common consent of all commercial nations, are such articles; and there is no other.

These two metals constitute also the principal basis of the money, or specie currency of all commercial countries; and as they are variously modified by weight and purity in the *coins* of different countries, a common standard must be resorted to, by which the relative value of the coins of the two countries may be ascertained and settled in their commercial dealings with each other.

Some one specific coin or money of account on each side is assumed between which a proportional value is established as the conventional par of exchange. Thus, between the United States and Great Britain,

the dollar of the former and the pound sterling of the latter, with their respective subdivisions, are assumed as the standards of comparative value, and the conventional proportion of value between them, commonly used in their commercial intercourse, and sanctioned by several acts of Congress, has settled the *par of exchange* at one pound sterling for four dollars and forty-four cents in the United States, while, in Great Britain, it is at four shillings and six pence for the dollar.

But observe:

First, That here are already two different bases of exchange—the American, which assumes the pound sterling for the unit, and estimates it in the proportional parts of the dollar, and the English, which assumes the dollar for the unit, and values it in the proportional parts of the pound sterling. This would have been immaterial, if the calculations upon which the exchange was originally settled, had been correct. But the results of the two estimates are not the same. If the dollar is worth four shillings and six pence, the pound sterling is equivalent to four dollars forty-four cents four milles, and an endless fraction of four decimal parts. If the pound sterling is worth four dollars and forty-four cents, four shillings and six pence, or fifty-four pence, are equal only to ninety-nine cents and nine milles. The difference is of one mille in a dollar, or one thousand dollars in a million.

Secondly, That the elements of this exchange, the two objects of comparative estimated value, are not homogeneous. The dollar of the United States is at once a money of account, and a specific silver coin, while the pound sterling, at the time when the exchange was settled, was only a money of account, having no coined representative in one piece of either of the precious metals. Since that time, indeed, the pound sterling has found a spurious representative in paper notes of the Bank of England, and of late a more truly sterling representative in the piece of gold which is called a *sovereign*. So that the pound sterling in England is an indefinite term, represented by three different materials, that is, in gold, by the sovereign, or by the guinea, with deduction of a shilling; in silver, by twenty shillings, or four crowns, or in paper, by a bank note.

In the United States, their coins, both of gold and silver, are legal tenders for payments to any amount; but in England silver coin is a legal tender for payments only to an amount not exceeding forty shillings, and by the restrictions of cash payments by the bank, the only actual currency, the only material in which an American merchant having a debt due to him in England can obtain payment is Bank of England paper. So that at this time the materials of *exchange* between the United States and England are, on the side of the United States gold or silver, on the side of Great Britain, bank paper.

Suppose an American merchant has a debt due to him in England, which is remitted to him in gold bullion, or coins of the English standard, say £10,000. He receives of pure gold 196 pounds, 2 ounces, 3 pennyweights, 22 grains, for which, when coined at the mint of the

United States, he receives 45,657 dollars 20 cents. The pound sterling, therefore, yields him 4 dollars 56.572 cents. And such is the value of the pound sterling, if the par of exchange be estimated in gold, according to the standard of purity common to both countries.

If the payment should be made in silver bullion, at 66 shillings the pound troy weight, according to the present English standard of silver coinage, he would receive only 43,489 dollars and 43 cents, and the pound sterling would only nett him 4 dollars 34.8943 cents.

The pound sterling, therefore, estimated in gold, is worth ..	$4 56.5720
in silver.....	4 34.8943
Making a difference of.....	21.6777
Half of which	10.8388
Added to $4 34.8943 and deducted from 4 56.5720 makes what is called the medium par of exchange, ...	$4 45.7331

It is contended by some writers upon the commercial branch of political economy, that this medium is the only equitable par of exchange; but this is believed to be an error. It is, perhaps, of as little importance what the conventional par of exchange is, as whether a piece of linen or of broadcloth should be measured by a yard or an ell. The actual exchange is never regulated by the medium or any other par, but by the relative value of bullion in the two countries at the time of the transaction; by the relative proportions between the value of gold and silver established in their respective laws; by the prohibitions of exportation of bullion sometimes existing, and the duties upon its exportation levied at others; by the laws, which, in some countries, make gold alone, in others silver alone, in others again both silver and gold, legal tenders for the payment of debts; by the existing condition of the commerce of the two countries, and of each of them with all the rest of the world; and last, and most of all, by the substitution of paper currency instead of the precious metals, in one or both of the countries, and the existing depreciation of the paper.

But the law of the United States, first enacted on the 31st July, 1789, sect. 18, prescribing that, for the payment of duties, the pound sterling of Great Britain shall be estimated at 4 dollars 44 cents, [U. S. Laws, Bioren's edition, vol. 2, page 22] is not so indifferent. This provision of the law has been continued in both the collection laws, since enacted, and, by that of 2d March 1799, [3 U. S. Laws, sect. 61, page 193] is still in force.

By section 30 of the act of Congress of 31st July, 1789, the duties were made receivable in gold and silver coin *only;* the gold coins of France, England, Spain, and Portugal, and all other gold of equal fineness, at 89 cents per pennyweight; the Mexican dollar at 100 cents; the crowns of France and England at one dollar and 11 cents each, and all silver coins of equal fineness at one dollar and eleven cents per ounce.

As this was one of the first experiments of legislation under the present constitution of the United States, it is unnecessary to make upon it many of the remarks which suggest themselves; but, with regard to those of its provisions which are still in force, let us observe,

That, on the 31st July, 1789, there had been no suspension of specie payments by the Bank of England. The pound sterling, if paid in gold, yielded 113.0014 grains of pure metal. If paid in silver, 1718.72 grains of pure silver.

That the dollars and cents in which this pound sterling was estimated by the act of 31st July, 1789, were not the dollars and cents of the standard now established, but of the standard established by the resolution of the old Congress of 8th August, 1786, and their ordinance of 16th October of the same year, [1 U. S. Laws, page 646] by which the dollar was to contain 375.64 grains of pure silver, and the eagle 246.268 grains of pure gold.

This dollar had been assumed as the money unit of the United States, upon a report from the Board of Treasury, dated 8th April, 1786, from which report it appears that the board intended and believed that it would be of equal value with the Spanish dollar, then generally current in the United States at four shillings and six pence sterling; excepting an allowance which they proposed to make for the waste and expense of coinage of silver. They made a similar allowance of $\frac{1}{2}$ per cent. upon the coinage of gold.[*]

[*$4.44 AS THE OFFICIAL PAR OF EXCHANGE WITH ENGLAND.

It is difficult to reconcile the strictures of Mr. Adams upon the recommendations of the Board of Treasury with the belief that he had made himself familiar with their triple report as a whole. While in some of their calculations they neglect the difference of alloy between the standard which they proposed for Silver ($\frac{1}{2}$) and the English standard ($\frac{37}{40}$), yet in other portions of their report they expressly allude to the existence of this difference. They also state as a fact that the Spanish dollar then current was accepted as the equivalent of 4*s.* 6*d.* sterling and the dollar proposed in their first report was intended to circulate as the equivalent of the Spanish dollar. What was the "Spanish dollar"? If it could be said that the Spanish dollars then in circulation, these dollars which were taken as the equivalent of 4*s.* 6*d.*, were all of the same weight and fineness, or if there had been some fixed standard to which they could be made to conform, by reduction of their value in currency to 99, 98, 97 cents, etc., according as the various pieces failed to reach this standard, it would then be possible to reason on the subject with the rigor with which Mr. Adams enters upon it.

In fact, however, the Spanish dollar was not a definite quantity. The Coins differed among themselves in weight and fineness and there was no official standard by which they could be rated in the currency. But beside the Spanish dollar, there was still another unknown quantity which Mr. Adams seems to treat as fixed and definitely known.

"A pound sterling," said Mr. Adams, "if paid in Silver yielded 1718.72 grains of fine Silver." Is this a correct statement? Of course if payments were actually made in Silver according to the English Mint price and Legal Standard (for they were the same), the statement must be correct. But no evidence is adduced that payments were act ually so made.

The ordinance assumed, for the standard of purity, both of gold and silver coins, eleven parts fine, and one part alloy. This standard was, with respect to gold, the same as that of England. But the English standard of silver coins is eleven ounces and two pennyweights of fine, to eighteen pennyweights of alloy; so that, while the English pound troy weight, of coined silver, contained 5,328 grains of pure metal, that of the United States, by the standard then established, contained only 5,280 grains.

In the elaborate calculations of the report, which were adopted as the basis of the ordinance, no allowance whatever is made for this difference of 48 grains in the pound troy, between the English standard and that prescribed for the United States. It expressly states that the English mint price of standard silver is sixty-two shillings sterling, and professes to prepare a dollar of *equal* value, excepting an allowance of two per cent. for waste and coinage. It then draws a proportion without reference to the difference between the two standards, and computes the sixty-two shillings of the English standard pound troy, as if they contained only 5,280, while they really contained 5,328 grains. The object of this omission apparently was, together with the two per cent allowance for waste and coinage, to preserve what the report states to have been the proportional value established by custom in the United States, between coined gold and silver of fifteen and six tenths for one, while their proportional value in the English coins was 15.21 for one.

The ordinance for the establishment of the mint, and for regulating the value and alloy of coin, therefore prescribed that bullion, or foreign coin, should be received there as follows:

Uncoined gold, or foreign gold coin, eleven parts fine, and one part alloy	1 lb. troy weight	$209 77
Silver, 11 parts fine and 1 part alloy	1 lb.	13 77 7

As there was no Silver Coin in England that was not worn down far below the legal weight, it is not probable that the Sterling Silver in America was in any better condition. The Silver shilling, therefore, like the Spanish dollar was *de facto* an uncertain quantity and the advantage it had of being compared with the definite standard given by the English coinage law was hardly important in practice so far as the relative value in American currency of the two Coins was concerned. Of course, if in fixing the conventional par with England reference was made to the Gold Coins a still further source of divergence of result is opened.

In all probability a large part of the guineas then in circulation were worn below their legal weight so that a comparison of Gold with Gold would offer difficulties analogous to those of comparison of Silver with Silver. Lastly, it is to be observed that the establishment of an American legal ratio between the two metals, which differed from the English legal ratio, while the market rate in the two countries respectively differed from both, rendered impossible the establishment of an official par which should maintain itself as correct. The establishment of $4.44 therefore as the official par of America with England was a very natural mode of fixing a scale of comparison between a country which used chiefly Gold guineas and a country which chiefly used Spanish dollars.

If in popular use the dollar was held the equivalent of 4*s.* 6*d.* the rate of $4.44 to the pound sterling based upon this fact must attain whatever result could attend the establishment of an official par.]

And so in proportion to the fine gold and silver in any other foreign coin, or bullion. And the dollar to be issued from the mint of the United States was settled at 375.64 grains of pure silver, because the report of the Board of Treasury had first supposed, contrary to that fact, that there were only 5,280 grains of pure silver in sixty-two shillings of English silver coin, consequently, only 383.225 grains, instead of 387, in four shillings and six pence, and then provided an allowance of two per cent. for waste and coinage. By these operations it seems to have been thought that the standard dollar of the United States would be of equal value with the Spanish dollar, then current in this country, and with four shillings and six pence of English silver coin. Thus, while, by the 18th section of the act of 31st July, 1789, the pound sterling was estimated, for the payment of duties, at four dollars and forty-four cents, by the 30th section of the same act, every pound sterling paid in guineas, or other gold, was received for $4.57.143, and if paid in English crowns, was received for $4.57.5445.

That the calculations upon which the rated value of gold and silver coins was fixed were loose and inaccurate, is apparent. The gold coins of France and Spain were rated as of the same standard of purity with those of England and Portugal; the crown of France as of equal value with the English crown; both without reference to their weight, and both as equivalent to an ounce of silver of the same fineness. It was well known and intended that all these coins should be rated at more than their intrinsic value, compared with the pound sterling, as estimated at 4 dollars 44 cents, or with the standards of gold and silver coins of the United States then established. The differences might be considered in the nature of a discount for prompt payment of the duties. And, as the merchants of the United States were deeply indebted in England, inasmuch as the pound sterling was undervalued, the difference was clear profit to them in discharging the balances due to their English creditors.

The act of 31st July, 1789, was, at the succeeding session of Congress, repealed, and that of 4th August, 1790, substituted in its stead, (2 U. S. Laws, p. 131.) The 40th and 56th sections of this act correspond with the 18th and 30th sections of that of 1789. The pound sterling is again rated at $4.44, and the coins as before.

But on the 2d April, 1792, passed the act establishing a mint and regulating the coins of the United States: by which the whole system established by the ordinance of 1786 was abandoned, and different principles and different standards were assumed. The standard of gold coins was left at 11 parts fine to one of alloy; but instead of 246.268 grains of pure gold, the eagle was required to contain 247½ grains. The silver standard was altered from 11 parts in 12 of fine, to 1485 parts in 1664. Instead of 375.64 grains of pure silver, the dollar was required to contain only 371 4/16 grains, and its weight, instead of 409 grains, was fixed at 416. The proportional value between gold and silver was fixed

by the same law, at fifteen for one; and instead of the allowance of two per cent. for waste and coinage, the principle was adopted of placing gold and silver coined at the same rate as uncoined, and of delivering at the mint coined, the same weight of pure metal as should be brought to it in bullion or foreign coin.

By this operation the value of the silver dollar as compared with British silver coin was reduced from 52.4539 pence sterling to 51.8409 pence; and the pound sterling, from $4.57.5445, was raised to be worth $4.62.955; and, at the same time, the value of the dollar estimated in the English gold coin was raised from 52.304 to 52.5656 pence, and the pound sterling was reduced in the gold coin of the United States from $4.57.143 to $4.56.572.

The act establishing the mint had, however, no direct reference to the value or the rates of foreign coins. But on the 9th February, 1793, passed the act regulating foreign coins, and for other purposes, (2 U. S. Laws, p. 328,) which made the gold coins of Great Britain and Portugal of their then standard a legal tender for the payment of all debts and demands at the rate of 100 cents for every 27 grains of their actual weight. The gold coins of France and Spain at the rate of 100 cents for every 27⅔ grains: Spanish dollars weighing not less than 415 grains at 100 cents: French crowns weighing not less than 459 grains, 110 cents each. The 55th (56th) section of the act of August, 1790, was repealed, but the 40th section was left in force, and the pound sterling was still receivable for $4.44. It was, however, thenceforward, whether paid in the gold coins of England or of the United States, worth $4.56.572.

A new collection law was enacted on the 2d March, 1799, which is still in force. In the 61st section of which (3 U. S. Laws, p. 193,) the pound sterling of Great Britain is again rated at 4 dollars 44 cents; while, in the 74th section, the gold coins of Great Britain of the standard prior to 1792, are receivable at the rate of 100 cents for every 27 grains. But a proviso is added to the 61st section, that the President may establish regulations for estimating duties on goods, invoiced in a depreciated currency; and a proviso to the 74th, that no foreign coins but such as are a lawful tender, or made receivable by proclamation of the President, shall be received.

In the act of 9th February, 1793, the English crown was not rated at all, and from that time no English silver has been a legal tender, nor consequently receivable in payment of duties.

The act of 10th April, 1806, regulating the currency of foreign coins in the United States, continued the rates established by the 74th section of the act of 2d March, 1799; and it required of the Secretary of the Treasury to cause assays to be made every year, and report them to Congress, of the foreign coins made tenders by law, and circulating in the United States.

29th April, 1816, (6 U. S. Laws, p. 117.) Act regulating the currency within the United States of the gold coins of Great Britain, France, Portugal and Spain, the crowns of France, and five franc pieces.

Gold coins of Great Britain and Portugal 27 grs. = 100 cts. or 88$\frac{8}{9}$ cts. per dwt.

France	27½	=	do.	87¼
Spain	28½	=		84

Crowns of France, weighing 449 grs. 110 cents, or $1.17 per oz.

Five franc pieces	386 grs. 93.3	1.16	do.

3d March, 1819. Act to continue in force the above act.

After 1st November, 1819, foreign gold coins cease to be a tender. Rest of the act to be in force till 29th April, 1821.

The act of 2d April, 1792, establishing the mint, was founded, in its principal features, upon the report of the Secretary of the Treasury, Hamilton. It is remarkable that in this report all notice of the ordinance of Congress of 16th October, 1786, is omitted.

It says, "a prerequisite to determining with propriety what ought to be the money unit of the United States, is to endeavor to form as accurate an idea as the nature of the case will admit of, what it actually is. The pound, though of various value, is the unit of the money of account of all the States. But it is not equally easy to pronounce what is to be considered as the unit in the coins. *There being no formal regulation on the point* (the resolutions of Congress of the 6th July, 1785, and 8th August, 1786, having never yet been carried into operation) it can only be inferred from usage or practice."

Now the ordinance of 16th October, 1786, was a formal regulation, which recognized the principles, in regard to the unit of coins, of the resolutions of 6th July, 1785, and 8th August, 1786; and the Congress, under the new constitution, had, by the two successive collection laws of 31st July, 1789, and 4th August, 1790, not only rated the foreign moneys of account, but foreign coins, by the standard of dollars and cents, established in the resolution of 8th August, 1786. Millions of dollars had been received in revenue, under those laws, in foreign coins estimated in those dollars and cents. A pamphlet was published by Mr. Boardley at Philadelphia, in 1789: in which he shews that the real value of the dollar, in the first collection law, was 52.46 pence sterling, and not 54, and adds: "I do not consider whether this valuation accords with a late declaration that twenty shillings sterling shall be estimated at the value of 4 dollars and 44 cents of the present dollar; but I recommend it to the consideration of others."

In the Gazette of the United States, of 24th October, 1789, is an essay entitled "A few thoughts concerning a proper money of account, by a gentleman of Virginia," in which it is fully shown that the valuation of the pound sterling, "as it stands rated by Congress at 4 dollars 44 cents," was inconsistent with the pennyweight of gold rated at 89 cents; that the pound sterling should be rated at 4 dollars 57$\frac{80}{623}$ cents, or the pennyweight of foreign gold coin at 86$\frac{19}{36}$ cents, instead of 89, which it states to be greatly to the injury of the revenue.

The alterations from the system established by the old Congress, recommended in Mr. Hamilton's report, and adopted by the law for establishing the mint, were, a dollar of 371¼ grains pure silver, instead of 375.64 grains; an eagle of 247½ grains pure gold, instead of 246.268; 15 for 1 proportional value of silver and gold, instead of 15.6 for 1.[*] Gratuitous coinage, instead of a duty of two per cent. for the bullion sent to the mint to be coined.

Mr. Hamilton proposed to leave the standard of purity of the silver coin at 11 parts in 12 pure, as it had been established by the old Congress. But, in this respect, the law departed from the principles of the Secretary. It took the weight as well as the pure contents of the Spanish dollar, then in circulation, for a model; not indeed its legal weight and purity, which would have been 420 grains, at 10¾ parts in 12 pure silver; but its actual weight and purity, with the allowances for remedy, and ascertained by the average from a considerable number of the Spanish dollars, of the coinage since 1772, which were then in actual circulation. The result gave us a dollar of 416 grains, and containing 371¼ grains of pure silver.

In the coins of the United States there is no allowance for what is called the remedy of weight; but assays of all coins issued from the mint are made, and if any of them are found inferior to the standard prescribed, to the amount of more than $\frac{1}{144}$ part, the officers of the mint, by whose fault the deficiency has arisen, are to be dismissed. This provision was adopted from what was stated in Mr. Hamilton's report to be the practice of the mint in England.

By the acts of incorporation of the Banks of the United States, their bills, *payable on demand*, are made receivable in all payments to the United States, unless otherwise directed by Congress.

By the acts of 31st July, 1789, and 4th August, 1790, the gold coins of Great Britain were rated at 89 cents the pennyweight. By the act of 9th February, 1793, passed after the change of the standard of our domestic coins, British gold coins were rated at 27 grains to the dollar, equivalent to 88$\frac{8}{9}$ cents the pennyweight, at which they stand to this day.

In the year 1797 the British parliament passed an act restricting the Bank of England from paying their own notes in specie, a restriction which has been continued to this day, with certain exceptions, by recent acts of parliament. The pound sterling, therefore, in all English invoices and accounts, is now neither gold nor silver, but bank paper. This paper has been at times so depreciated that Spanish dollars have been issued by the bank itself, successively, at five shillings and five shillings and sixpence the dollar, and they have passed in common circulation at six shillings.

In the year 1816 there was a coinage of silver at the mint, in which the pound troy weight of standard silver was coined into 66 shillings, instead of 62 shillings, which had been the standard before.

[*Error.]

And an act of parliament of 2d July, 1819, confirms the restrictions upon cash payments by the bank, until the first day of May, 1823, with the following exceptions.

1. That, between 1st February and 1st October, 1820, any person tendering to the bank its notes payable on demand, to an amount not less than the price or value of sixty ounces of gold, at the rate of four pounds one shilling per ounce, shall receive payment in gold, of the lawful standard at that rate of £4 1*s.* per ounce.

2. That, from 1st October, 1820 to 1st May, 1821, such payments shall be made in gold, calculated after the rate of £3 19*s.* 6*d.* per ounce.

3. And that, from the 1st of May, 1821, to the 1st of May, 1823, they shall be make in gold, calculated after the rate of £3 17*s.* 10½*d.* per ounce. All these payments to be made, at the option of the bank, in ingots or bars, of the weight of sixty ounces each, and not otherwise.

Throughout this whole canto of mutability, the pound sterling of Great Britain, from the 31st July, 1789, to this day, has been rated by the laws of the United States, at 4 dollars and 44 cents.

There has probably been no time since the establishment of the mint of the United States, nor since the first establishment of the dollar as the unit of account in the moneys of the United States, when this has been the intrinsic value of the pound sterling, whether computed in gold, silver, or bank paper.

A proclamation of Queen Anne, issued in the year 1704, declared that the Spanish, Seville, and Mexican, *pieces of eight*, (as dollars were then called) had, upon assays made at the mint, been found to weigh seventeen pennyweights and a half (420 grains,) and to be of the value of four shillings and sixpence sterling, from which the inference is conclusive that they contained of pure silver 387 grains, and the proclamation accordingly prohibited their passing, or being received, for more than *six* shillings each, in the currency of any of the British colonies or plantations. An act of parliament in 1707, corroborated by penalties the prohibition contained in the proclamation. Six shillings for the Spanish dollar became thenceforth the standard of lawful money in the colonies, although the currencies of some of them afterwards departed from it. In 1717 Sir Isaac Newton, being master of the mint, again made assays of the Spanish dollars, and found them still to contain 387 grains. From this standard they successively fell off in 1731, in 1761, and in 1772; since which their average weight and purity has been that at which the dollar of the United States is fixed.

The dollar being thus of the intrinsic value of four shillings and sixpence sterling, the pound sterling was of course equivalent to 4 and $\frac{4}{9}$ of the dollar. This was the par of exchange, computed in the *silver coins* of the two countries, for even then if the computation had been made between their gold coins, the result would have been different.

Thus, while the laws of the United States, in establishing their mint, and the unit of their currency, have assumed for their standard the

Spanish dollar of 1772, in the calculations of their revenue and their estimate of the English pound sterling, they have adopted the Spanish dollar of 1704.

But when, in 1704, the value of the Mexican dollar was fixed at four shillings and six pence, it was because it contained 387 grains of pure silver, the same quantity which was also contained in four shillings and six pence of English coined silver. At this time, four shillings and six pence sterling of English silver coin, contain only 363¼ grains of pure silver, and the dollar of the United States contains 371¼ grains.

The following statements show the relative present value of the dollar and pound sterling in the gold and silver coins of both countries, in gold bullion, as payable by the Bank of England, and in English bank paper at its current value in 1815.

1. *Gold.*

One pound troy weight of standard gold in England contains 5,280 grains of pure gold. It is coined into £46 14*s.* 6*d.* or 11,214 pence.

Then 11,214 : 5,280 :: 240 : 113.0014 grains of pure gold in a pound sterling.

In the United States 24.75 grains of pure gold is coined into a dollar, or 247.5 grains to an eagle.

Then 24.75 : 1 :: 113.0014 : 4.56572 dollars, cents, &c. to £1.

Thus the pound sterling in gold is worth $4 56.572.

And as 5,280 : 11,214 :: 24.75 : 52.5656.

Dollar in English gold 4*s.* 4.5656.

Pound sterling in gold $4 56.572.

2. *Silver.*

One pound troy weight of standard silver in England contains 5,328 grains of pure silver, and is coined into 66 shillings, or 792 pence.

The dollar of the United States contains 371.25 grains of pure silver.

Then, 5,328 : 729 :: 371.25 : 55.1858.

Dollar in English silver 4*s.* 7.1858.

792 : 5328 :: 240 : 1,614.545 grains pure silver in a pound.

371.25 : 1,614,545 :: 1 : 4.348943.

Pound sterling in silver $4 34.8943.

Medium par dollar, 4*s.* 5.8757 pence.

£ stg. in gold $4 56.5720—
in silver 4 34.8943+ 10.8388 = $4 45.7331 med. par £ stg.

3. *Value of the pound sterling and dollar in gold and silver coins, in gold bullion, and in English bank paper.*

	Pence stg.
Value of United States dollar in English silver coin at 66 shillings per lb. troy weight	55. 1858
In English gold coin at £3 17*s.* 10½*d.* per oz	52. 5656
In English bank notes in 1815	72.
In gold bullion at £4 1*s.* per ounce	54. 675

	D.	Cents.
English pound sterling, in silver coin, worth in the United States, silver dollars,	4	34. 8943
Gold coin at £3 17*s.* 10½*d.* per oz. in United States gold	4	56. 5720
In English bank notes, 1815	3	33. 3333
In gold bullion at £4 1*s.* per ounce	4	38. 9574
In ditto at 4	4	44. 4444

DISCUSSIONS PRELIMINARY TO THE ALTERATION OF THE RATIO.

MEMORANDUM OF A REPORT OF A COMMITTEE OF THE HOUSE TO INQUIRE WHETHER IT BE EXPEDIENT TO MAKE ANY AMENDMENT IN THE LAWS WHICH REGULATE THE COIN OF THE UNITED STATES AND FOREIGN COINS RESPECTIVELY.

On January 26, 1819, Mr. Lowndes (of South Carolina) presented a report of considerable length, the principal recommendations of which were that the Gold pieces be reduced in weight to 22.798 grains of pure Gold to the dollar, that a seigniorage of 14.85 grains pure Silver to the dollar be charged for the Silver coins, and the legal tender of Silver pieces below the half-dollar be limited to five dollars.

It was intended by this measure that the ratio should be changed from 15 to 15.60, but the deduction of the proposed seigniorage would have left the ratio of the coins a minute fraction lower than 15, while the ratio of 15.60 would have been realized only in the ratio of the mint price of Silver to the mint price of Gold.—H.

REPORT ON CURRENCY, MADE TO THE HOUSE OF REPRESENTATIVES OF THE U. STATES, 24TH FEBRUARY, 1820, BY WM. H. CRAWFORD, SECRETARY OF THE TREASURY.

TREASURY DEPARTMENT,
12th February, 1820.

SIR: In obedience to a resolution of the House of Representatives, passed on the 1st of March, 1819, directing "the Secretary of the Treasury to transmit to Congress, at an early period in the next session, a general statement of the condition of the Bank of the United States,

and its offices, similar to the return made to him by the bank; and a statement, exhibiting, as nearly as may be practicable, the amount of capital invested in the different chartered banks in the several States and the District of Columbia, the amount of notes issued by those banks and in circulation, the public and private deposites in them, the amount of loans and discounts made by them, and remaining unpaid, and the total quantity of specie they possess; and, also, to report such measures as, in his opinion, may be expedient to procure and retain a sufficient quantity of gold and silver coin in the United States, or to supply a circulating medium in place of specie, adapted to the exigencies of the country, and within the power of the government:" I have the honor to submit the subjoined report and statements.

Statement A, exhibits the condition of the Bank of the United States, and its offices, on the 30th of September, 1819.

Statement B, exhibits the amount of bank capital, authorized by law, during the years 1814, 1815, 1816, and 1817. As this statement is founded upon the applications made to the Treasury under the acts imposing stamp duties, it is believed to be substantially correct. The average dividends upon which the stamp duty was paid, during those years, amounted to about 7½ per cent. upon the nominal amount of capital; it is, however, a matter of general notoriety, that the dividends upon bank capital, actually paid, exceeded that rate. If it is assumed, that the dividends declared, and upon which the duty was paid, amounted, during those years, to 10 per cent., then the capital actually paid, in the year 1817, instead of being more than $125,000,000, as it is exhibited in Statement B, will be found to be about $94,000,000; but, when it is recollected that, after the first payment required by the charters of the different banks, they have generally gone into operation, it is probable that a considerable proportion of the remaining payments have added nothing to their active capital. This fact being assumed, and a deduction being made of the amount of permanent accommodation enjoyed by the stockholders, in their respective banks, the active bank capital of the United States may be fairly estimated at a sum not exceeding $75,000,000. That these deductions ought to be made, in an attempt to ascertain the real amount of bank capital, cannot, it is presumed, be contested. If a stockholder, to the amount of $10,000, has a permanent accommodation in the bank, of $8,000, he has, in fact, but $2,000 of capital in the bank. This is equally true when a portion of his subscription has been paid with his own note, however well endorsed: so long as the note remains unpaid, it adds nothing to the real capital of the bank.

Such, it is believed, has been the process by which the capital of most of the banks has been formed, which have been incorporated since the commencement of the late war. Since that period, banks have been incorporated, not because there was capital seeking investment; not because the places where they were established had commerce and man-

ufactures which required their fostering aid; but, because men, without active capital, wanted the means of obtaining loans, which their standing in the community would not command from banks or individuals having real capital and established credit. Hence the multiplicity of local banks, scattered over the face of the country, in particular parts of the Union; which, by the depreciation of their paper, have levied a tax upon the communities within the pale of their influence, exceeding the public contributions paid by them.

Statement C, presents the condition of the State banks from which returns have been received, or have been transmitted by the Secretaries of State of different States, in conformity with the request of the Treasury Department. By comparing this Statement with Statement B, it will be perceived that it is very imperfect. Independently of the banks which have been created since the year 1817, it will be discovered, that bank capital to the amount of more than $18,000,000, comprehended in Statement B, is not embraced in it. As the amount of bank capital exhibited in Statement C is $72,000,000, and its specie $9,828,000, the whole specie possessed by the State banks may be estimated at $12,250,000; if to this sum be added the specie in the possession of the Bank of the United States, and its offices, the specie capital of all the banks in the United States may be estimated at $15,500,000. There are no means of ascertaining, with any degree of precision, the amount of specie in circulation; it is probable, however, that it does not exceed $4,500,000. Assuming this amount to be nearly correct, the whole metallic currency of the Union may be estimated at $20,000,000. Applying the same rule for ascertaining the circulation of the banks, not embraced by Statement C, which has been employed to determine their specie, the whole amount of bank notes in circulation may be estimated at $46,000,000. It is probable, however, that this estimate is too high; as, according to the general practice of banks, all notes issued are considered in circulation, which are not in the possession of the bank by which they were issued. A reasonable deduction being made from the notes supposed to be in circulation, but which are, in fact, in the possession of other banks, it is probable that the actual circulation, both of paper and specie, is less, at this time, than $45,000,000. By the same mode of calculation, the whole amount of discounts may be estimated at $156,000,000.

The destruction or loss of the returns made to the Treasury, before the year 1816, by the banks in which the public money was deposited, prevents any satisfactory comparison being drawn between their condition before and since that period. Comparative statements, however, have been received from sixteen banks in different parts of the Union, showing their situation on the 30th day of September, in the years 1813, 1815, and 1819. By Statement D, it appears that those banks, at the first period, with a capital of $6,903,262, and with $3,059,149 of specie in their vaults, circulated $6,845,344 of their notes, and discounted

to the amount of $12,990,975: at the second period, their capital was $8,852,371; specie, $1,693,918; circulation, $9,944,757; and discounts, $15,727,218; and at the third period, their capital was $9,711,960; specie, $1,726,065; circulation, $4,259,234; and discounts, $12,959,560.

By Statement B, already referred to, it has been shown that, in the year 1814, the nominal bank capital in the United States exceeded $80,000,000. It is understood that a large addition was made to it, in that year, in several of the States. If it be admitted that such addition amounted to $15,000,000, the bank capital in operation, in the year 1813, may be stated at $65,000,000. Allowing to this capital the same amount of specie, circulation, and discounts, as was comparatively possessed by the banks comprehended in Statement D, the estimate will be, specie $28,000,000; circulation $62,000,000; and discounts $117,000,000. In 1815, the bank capital had increased to $88,000,000; whilst, upon the same principle of calculation, the specie would have been estimated at $16,500,000, circulation at $99,000,000, and discounts at $150,000,000. Applying this principle to the $125,000,000 of bank capital in operation during the year 1819, the specie possessed by all the banks would amount to $21,500,000, circulation $53,000,000, and discounts $157,000,000.

These last results, with the exception of the discounts, very materially differ from those which have been obtained by the mode of calculation previously adopted. They nevertheless furnish materials which may be useful in the progress of this inquiry. From them the following deductions may be drawn:

1st. That, in the year 1813, the circulation of bank notes was nearly equal to the bank capital.

2d. That, in the year 1815, it exceeded the capital by one-eighth.

3d. That, in the year 1819, it was less than the capital, nearly in the proportion of 1 to 2.5.

4th. That, whilst the amount of bank capital has increased since 1813, from 65. to 125., the metallic basis, upon which the circulation of notes is founded, has decreased in the proportion of 15.5 to 28; being equal to 44.6 per cent.

5th. That the circulation of notes in the year 1819, in proportion to the specie in the possession of the banks, exceeded that of 1813, 25.9 per cent.

6th. That, in the year 1813, the discounts, in proportion to the bank capital employed, exceeded those of 1815, in the ratio of 18 to 17, and those of 1819, in the ratio of 18 to 12.

7th. That the increase of bank notes in circulation, between the years 1813 and 1815, exceeded the increase of discounts during the same period by $4,000,000; whilst the specie in the vaults of the banks was diminished $11,000,000.

8th. That whilst, between the years 1815 and 1819, an addition of $37,000,000 has been made to the nominal bank capital, but $6,000,000 have been added to the aggregate amount of discounts.

It is probable that, between the year 1811 and the year 1813, a considerable addition was made to the paper circulation of the country. From a return of the former Bank of the United States, made to the Treasury in 1808, it appears that, with $15,300,000 of specie, it circulated only $4,787,000 of notes. Another return made in 1810, shows its condition was not materially changed. Shortly after the expiration of its charter, bank capital, to a great amount, was incorporated in some of the States. The expenditures produced by the war, which was declared in 1812, without doubt contributed in some degree to produce the difference between the condition of the sixteen banks already referred to, and that of the former bank of the United States. If it be admitted, however, that the circulation in 1813 was not redundant, it must have become excessive in 1815. An increase of the currency, in the space of two years, in the proportion of 99 to 62, even if it had been wholly metallic, could not have failed to have produced a very great depreciation; but when it is considered, that not only the increase, but the whole circulation consisted of paper, not convertible into specie, some idea of its depreciation may be formed. The depreciation, however, was not uniform in every part of the Union. The variation in the degree of depreciation depended not only upon the greater issues of banks in one section of the nation, than in others; but, also, upon the local advantages which they enjoyed as to commerce. It is impossible to determine, with precision, where the most excessive issue of bank-notes occurred. Statement E, which exhibits the rate of exchange between the principal cities to the east of this place, and London, and the price of bills at New York upon Boston, Philadelphia, and Baltimore, during the years 1813, 1814, 1815, and 1816, may be considered presumptive evidence of that fact. So far as it can be relied upon for that purpose, Baltimore was the point of greatest depreciation among the above-mentioned places. This is probably true; as it is known that the banks in that place made greater advances to the government in the loans which it obtained during the late war, in proportion to their capital, than those of Philadelphia, New York, and Boston. But the greatest depreciation of the currency existed in the interior States, where the issues were not only excessive, but where their relation to the commercial cities greatly aggravated the effects of that excess.

This statement may also assist in explaining the cause of the necessity which existed in 1814, for the suspension of specie payments by the banks. From the commencement of the war until that event, a large amount of specie was taken out of the United States, by the sale of English government bills, at a discount, frequently of from 15 to 20 per cent. Immediately after the suspension, they commanded a premium in those places where the banks had suspended payment, which gradually rose to 20 per cent.; whilst at Boston they remained at a discount of about 14 per cent, until February, 1815.

Whatever may have been the degree of depreciation of the currency,

in 1815, it continued to augment throughout the first six months of the year 1816, if the rate of exchange with London is considered conclusive evidence of that fact. The excessive importations of British merchandise during that period, and in the preceding year, might indeed account for the increase of premium paid upon sterling bills, and was, probably, one of the principal causes of it. The great fluctuations which occurred in the latter part of that period, furnish some reason, however, for ascribing them, in some degree, to changes in the value of the currency, in which their price was calculated, rather than to the ordinary principles of exchange. It is more probable that the currency in those places where it was not convertible into specie, fluctuated in value according to the efforts which were made, in particular places, to prepare for the resumption of specie payments, than that the balance of payments between the two countries should have varied to such an extent as is indicated by the sudden variations which occurred during that period in the rate of exchange. So far as these fluctuations are ascribable to the currency in which the rate of exchange was determined, a considerable appreciation of that currency took place in the last months of the year 1816. From that period until the present time, the circulation has rapidly diminished; and all the evils incident to a decreasing currency, have been felt in every part of the Union, except in some of the eastern States.

If, as previously stated, the circulation of 1813 be admitted to be the amount required to effect the exchanges of the community with facility and advantage, and that, in the year 1815, that circulation was extended to $99,000,000, which was, in some degree, augmented in 1816, the extent of the diminution of the currency, in the space of three years, may be perceived. But it is probable that the currency in 1815 exceeded $99,000,000. The banks, upon whose situation that estimate is founded, were established at a period when the practice of dispensing with the payment of those portions of their capital falling due after they went into operation, had not been generally introduced. Some of them did not suspend specie payments, during the general suspension. The rest were among the first to resume them, and have continued them to the present time. It cannot be expected that banks which went into operation during the war, and after the general suspension had occurred, were conducted with an equal degree of prudence and circumspection. A reasonable allowance being made for bank notes supposed to be in circulation at that period, but which were, in fact, in the possession of other banks, and for the excess of issues beyond the estimate, the circulation may, it is believed, be safely calculated at not less than $110,000,000. The paper circulation in 1813 has been estimated at $62,000,000. At that period, however, gold and silver formed a substantial part of the currency. The condition of the old bank of the United States, in 1810, and of the sixteen banks in 1813, proves that the demand for specie from the vaults of the banks was inconsiderable.

It is, therefore, probable, that the whole circulation of 1813 amounted to $70,000,000. In 1815, it is estimated to have risen to $110,000,000; and this amount was probably augmented in 1816. At the close of 1819, it has been estimated, upon data believed to be substantially correct, at $45,000,000. According to these estimates, the currency of the United States has, in the space of three years, been reduced from $110,000,000 to $45,000,000. This reduction exceeds fifty-nine per cent., of the whole circulation of 1815. The fact that the currency in 1815 and 1816, was depreciated, has not sensibly diminished the effect upon the community, of this great and sudden reduction. Whatever was the degree of its depreciation, it was still the measure of value. It determined the price of labor, and of all the property of the community. A change so violent could not fail, under the most favorable auspices in other respects, to produce much distress, to check the ardor of enterprise, and seriously to affect the productive energies of the nation. The reduction was, in fact, commenced under favorable auspices. During the year 1817, and the greater part of 1818, all the surplus produce of the country commanded, in foreign markets, higher prices than ordinary. The rate of foreign exchange afforded no inducement for the exportation of specie for the purpose of discharging debts previously contracted. The only drain to which the metallic currency was subject, was the demand for it for the prosecution of trade to the East Indies and to China. In this trade, specie being the principal commodity, and indispensable to its prosecution, the amount exported during those years was very great, and seriously affected the amount of circulation, by compelling the banks to diminish their discounts.

Notwithstanding the drains for this commerce during these years was unusually large, every other circumstance was favorable to the restoration of the currency to a sound state, with the least possible distress to the community. The capacity of the country to discharge a large portion of the debts contracted with banks, and which had occasioned their excessive issues, was greater than at any former period, and than it probably will be again for a lapse of successive years. The effort to reduce the amount of currency during those years, though successful to a considerable degree, was not pursued with sufficient earnestness. In the latter part of 1818, when the price of the principal articles of American production had fallen nearly fifty per cent. in foreign markets; when the merchant needed the aid of additional loans to sustain him against the losses which he had incurred by the sudden reduction in the price of the commodities he had exported; he was called upon to discharge loans previously contracted. The agriculturist, who saw his income reduced below his indispensable necessities; the manufacturer, who was not only struggling against foreign competition, but who saw the sale of his manufactures reduced by the incapacity of his customers to buy; in fact, all classes of the community, under circumstances so adverse to the command of funds, were subjected to curtailments wherever they had obtained discounts.

All intelligent writers upon currency agree that where it is decreasing in amount, poverty and misery must prevail. The correctness of the opinion is too manifest to require proof. The united voice of the nation attests its accuracy. As there is no recorded example in the history of nations of a reduction of the currency so rapid and so extensive, so, but few examples have occurred of distress so general and so severe as that which has been exhibited in the United States. To the evils of a decreasing currency are superdaded those of a deficient currency. But, notwithstanding it is deficient, it is still depreciated. In several of the States the great mass of the circulation is not even ostensibly convertible into specie at the will of the holder. During the greater part of the time that has elapsed since the resumption of specie payments, the convertibility of bank notes into specie has been rather nominal than real in the largest portion of the Union. On the part of the banks, mutual weakness had produced mutual forbearance. The extensive diffusion of bank stock among the great body of the citizens in most of the States, had produced the same forbearance among individuals. To demand specie of the banks, when it was known that they were unable to pay, was to destroy their own interests, by destroying the credit of the banks, in which the productive portion of their property was invested. In favor of forbearance, was also added the influence of the great mass of bank debtors. Every dollar in specie drawn out of the banks, especially for exportation, induced the necessity of curtailments. To this portion of the community all other evils were light, when compared with the imperious demands of banks. Their exertions to prevent the drain of specie in the possession of those who controlled their destiny, equalled the magnitude of the evils which were to be avoided. In most parts of the Union this forced state of things is passing away. The convertibility of bank notes into specie is becoming real wherever it is ostensible. If public opinion does not correct the evil in those States where this convertibility is not even ostensible, it will be the imperious duty of those who are invested with the power of correction to apply the appropriate remedy.

As the currency is, at least in some parts of the Union, depreciated, it must, in those parts, suffer a further reduction before it becomes sound. The nation must continue to suffer until this is effected. After the currency shall be reduced to the amount which, when the present quantity of the precious metals is distributed among the various nations of the world, in proportion to their respective exchangeable values, shall be assigned to the United States; when time shall have regulated the price of labor, and of commodities, according to that amount; and when pre-existing engagements shall have been adjusted, the sufferings from a depreciated, decreasing, and deficient currency, will be terminated. Individual and public prosperity will gradually revive, and the productive energies of the nation resume their accustomed activity. But new changes in the currency, and circumstances adverse to the perpetuity of

the general prosperity, may reasonably be expected to occur. So far as these changes depend upon the currency, their recurrence, to an extent sufficient to disturb the prosperity of the nation, would be effectually prevented, if it could be rendered purely metallic. In that event, we should always retain that proportion of the precious metals which our exchangeable commodities bear to those of other nations. The currency would seldom be either redundant or deficient, to an extent that would seriously affect the interest of society. But when the currency is metallic, and paper convertible into specie, changes to such an extent, it is believed, will frequently occur.

The establishment of banks which are restrained from issuing notes of small denominations, furnishes great facilities for the transmission of money, and increases the efficiency of the capital subject to their control, to the extent of the credit employed by them. The degree of facility afforded by them, for the transportation or transmission of money, depends upon the extent of country within which their notes circulate, and preserve a value equivalent to specie. Ordinarily, this extent is determined by the interior trade of the country; they will circulate through the whole extent of country, the produce of which is carried for sale to the place of their establishment. If they are established only in the principal commercial city of the nation, their notes will circulate through the whole extent of its territory, and afford the greatest possible facility for the transmission of money. If they are established in several of the commercial cities, their circulation will be circumscribed by the sections of country, the inhabitants of which trade to those cities. The facility for transmitting money will be diminished by their establishment. But if banks should be established in all the interior towns, this facility would be impaired to a still greater degree. In that event, their notes would circulate within very narrow limits; but, within those limits, the notes of the banks in the commercial cities would no longer form part of the circulation. Should they, by accident, be carried within it, the first individual having remittances to make, and into whose hands they might come, would use them for that purpose.

The degree of credit which a bank can employ, in proportion to its capital, depends upon a variety of circumstances. If the community reposes great confidence in the prudence and integrity of those who direct its concerns; if the capital employed is small in proportion to the demand for the transmission of money; if there is no other bank, whose local situation repels its circulation from those sections of country, the produce of which is ultimately carried to the place where it is established, the credit which it will be able to employ will be very great. Where all these facilities are wanting, the extent of the credit which it will employ will be very inconsiderable. The additional efficiency which, in the latter case, will be imparted to capital invested in banks, will, it is believed, not countervail the evils which necessarily result from their establishment.

Among the advantages which have been supposed most strongly to recommend their establishment, especially in a community whose resources are rapidly expanding, their capacity suddenly to increase the currency to the utmost demand for it, has been considered the most important.

In a country where the currency is purely metallic, no considerable addition can be made to it, without giving, at the time of its acquisition, articles in exchange of equal value. No addition can be made to the currency without affecting, to the extent of such addition, the enjoyments of the community. The amount so added will, to the same extent, diminish the quantity of articles which would otherwise be imported into the country for domestic consumption, or for re-exportation.

Ordinarily, the currency of one country will not be exported to another, because its value in every country is nearly the same. It will not, therefore, like other commodities, command a commercial profit upon exportation. It will be taken from one country to another, only when the price of commodities in the former is so high as to produce a loss in the latter, equal to the expense of transporting specie. It is this condition, annexed to every acquisition to the currency of a State, when it is purely metallic, of diminishing, to the same extent, the enjoyments of the community, which affords the most efficient protection against its becoming redundant. It is equally efficient in guarding against a deficiency, to an extent that can seriously affect the interest of the community. But this condition is not annexed to the increase of the currency, by the issue of bank notes, even when convertible into specie. The notes, by which the currency is suddenly augmented, do not, in any degree, diminish the enjoyments of the community. No equivalent is, by such issue, transferred to another community, as is invariably done when an acquisition is made to a metallic currency. Whenever the currency can be augmented, exempt from such transfer, it must be subject to some degree of fluctuation in quantity. Every addition made to the currency by the issue of bank notes, changes the relation which previously existed between the amount of the currency and the amount of the commodities which are to be exchanged through its agency. Their issue depends, not upon receiving in exchange articles of equal value, but upon a pledge of the credit of one or more individuals, to the amount of such issue. No evil can result to the community from the advance of the capital of a bank in exchange for the credit of individuals. In that case, no addition is made to the amount of the currency previously in circulation. It is perfectly immaterial to society, whether this capital be lent by individuals or by corporations. The relation between the currency and the exchangeable commodities of the State is not disturbed. But, when their credit is greatly extended, the currency is expanded, and that relation is deranged. An expansion of the currency, through the agency of banks, will generally occur only in periods of prosperity. During such periods, enterprise will be fostered, industry stimulated,

and the comfort and happiness of the people advanced without the factitious aid of an expansive currency. But there can be no doubt that a sudden increase of the currency during periods of prosperity, through the agency of bank issues, gives additional force and activity to the national enterprise. Such an increase will be followed by a general rise in the value of all articles, especially of those which cannot be exported. The price of lands, houses, and public stock, will be augmented in a greater degree than if no such increase had taken place.

If these prices could be maintained; if they could even be protected against sudden reduction, they would be cause of gratulation rather than of complaint. But the expansion of the currency by the issue of paper, in a period of prosperity, will inevitably be succeeded by its contraction in periods of adversity. The extent to which the currency may be contracted, through the agency of banks, depends upon the use which they may have made of their credit. The excess of their discounts beyond their capital actually paid, determines the amount of the credit which they have employed. Thus, in 1813, the capital of the banks in the United States has been estimated at $65,000,000, and their discounts at $117,000,000. The extent to which their credit was then employed was $52,000,000. Their circulation, at the same period, has been estimated at $62,000,000. In this estimate no allowance was made for notes stated to be in circulation, but which were probably in the possession of other banks. A reasonable deduction being made on that account, it is probable that the paper circulation did not much exceed $52,000,000. But the liability of the banks for specie, was equal to the whole amount of notes represented to be in circulation, besides the individual deposites. To meet an immediate demand, they are estimated to have had $28,000,000 in specie. If the deposites of individuals should be estimated at $18,000,000, their ultimate means of meeting the demand of $62,000,000, without sacrificing their capital, would consist of $10,000,000 in specie, and $52,000,000 secured by the notes of individuals; this sum being the excess of their discounts over their capital. Under ordinary circumstances, the basis upon which the credit of this circulation rested, might be considered sufficient to sustain it. A debt of $117,000,000 could not, under the most adverse circumstances, be considered inadequate to meet one of $52,000,000. But, in the case of currency, the capacity of ultimate redemption is not sufficient. The capacity to redeem it as it is presented is indispensable. Whenever the public confidence in this capacity is impaired, an immediate demand for specie will be created; and, if it is not promptly met, depreciation will ensue. But, even in circumstances in some degree adverse to the operations of banks, if their discounts consisted principally of notes founded upon real transactions, in which the idea of renewal was excluded; and if specie formed a considerable proportion of the circulation, the capacity of the banks to meet the demands upon them for specie, might have been sufficient to sustain the credit of the currency. If, on the other hand, the debts

due to the banks consisted chiefly of fixed or permanent loans, generally denominated accommodation paper; if specie had been banished from circulation, by the issue of dollar notes, the suspension of payment by the banks could not fail to be the result of any considerable pressure upon them for specie. In the former case, as their notes should be withdrawn from circulation, they would gradually be reduced to the demand for them for the transmission of money. If the effort to withdraw them should be continued beyond that point, specie would be paid into the banks by their debtors, in preference to bank notes; and the just proportion between the paper circulation, and the specie in their vaults, would be promptly restored. In the latter case, as the debts due to the banks would not, according to the understanding of the parties, become due at short intervals, the only mode of meeting the increasing demands upon them for specie would be to require of the whole mass of debtors the payment of a fixed proportion of the sums due by them. As the circumstances which would require this measure, on the part of the banks, would generally affect the community in the same degree, the capacity of their debtors to meet this demand would generally be found to be in an inverse ratio to the demand. The demand itself being inconsistent with the impression under which the debt was contracted, would be resisted in every case where the interest of the debtor would be subserved by delay. As specie formed but an inconsiderable part of the currency, the reduction of the paper circulation would have to be carried to a greater extent than in the former case. A just proportion between the paper circulation and the specie necessary to support it, could be obtained only by the positive reduction of the former, as it would be impracticable to increase the latter while the demand continued. Under such circumstances, the suspension of payment would be the probable result.

Such, in fact, were the circumstances under which the suspension in 1814 occurred.

The injudicious multiplication of banks, where capital in that form, to some extent, might have been useful; the establishment of them where they could only be injurious; the permission to issue dollar notes, by which specie was banished from circulation; and the demand for specie for exportation, which existed during the years 1813 and 1814, imposed upon the banks in the middle, southern, and western States, the necessity of suspending payment. A longer effort to discharge their notes in specie would not only have been ineffectual, but would certainly have postponed, to a more remote period, the resumption of specie payments. The evils which have resulted to the community from that suspension have certainly been great: but it may well be doubted, whether others of equal magnitude would not have been suffered, if that event had not occurred. The extent to which the currency must have been reduced, in order to have avoided the suspension, could not have failed, at any period, to produce great embarrassment and distress to the com-

munity. But in a time of war, when the country was invaded when the public safety required that the energies of the nation should be fully developed, a sudden and extensive reduction of the currency, by any cause whatever, would have been fatal. Under such circumstances, the demand for currency would have been too imperious to be resisted. It would, from necessity, have been supplied by the issue of Treasury Notes.

The fact, that, in a small portion of the Union, specie payments were continued, cannot be admitted as evidence that it was practicable throughout the nation. In that part of the country, the extensive bank issues, consequent upon loans to the government in the middle States, had not occurred. Foreign trade, which, in the other parts of the Union, was nearly annihilated, still preserved there a languid existence, through the permission or connivance of the enemy. These circumstances could not fail to enable the banks in the eastern States, to continue specie payments longer than those in the middle, southern, and western States. In an effort to preserve their credit, they would, inevitably, be the last which would fall. In such a struggle, however, they must have failed, had not the circulation of the paper of their weaker neighbors, and the issues of Treasury Notes come to their aid. But for this adventitious assistance, wholly unconnected with the wisdom and foresight of their directors, specie payments must have been suspended there, or the best interests of the community have been sacrificed. From that period, until the resumption of specie payments in the early part of 1817, Treasury Notes, and the notes of the banks which had suspended payment, formed the great mass of the circulation in the eastern part of the Union. Specie, or the notes of banks which continued to pay specie, formed no part of the receipts of the government in Boston, and the districts east of that town, until about the close of the year 1816.

In all great exigencies, which, in the course of human events, may be expected to arise in every nation, the suspension of payment by banks, where the circulation consists principally of bank notes, is one of the evils which ought to be considered as the inevitable consequence of their establishment. Even in countries where paper does not form the principal part of the circulation, such an event will sometimes happen. In the year 1797, when the restriction was imposed upon the bank of England, the average of its circulation for several successive years was about £10,000,000 sterling, whilst the metallic currency was estimated at £30,000,000. Yet, in that country, whose trade in time of war, through the protection of its fleets, was rather expanded than contracted, it was found necessary to authorize the bank to suspend payment; which suspension, after a lapse of twenty-three years, still continues. When the existence of banks depends upon the authority which regulates the currency, it may be practicable to impose salutary checks, against excessive issues of paper during suspension; and, in some degree, to guard against an excessive depreciation of the currency. But, where these institutions are created by an authority having no power to regulate the currency,

and, especially, where they are created by a great variety of authorities independent of each other, and practically incapable of acting in concert, it is manifest that no such checks or restraints can be imposed. It is impossible to imagine a currency more vitious than that which depends upon the will of nearly four hundred banks, entirely independent of each other, when released from all restraint against excessive issues. By the term currency, the issue of paper by government, as a financial resource, is excluded. Even such an issue, in a State where the reign of law is firmly established, and public opinion controls the public councils, would be preferable to a currency similar to that which existed in some parts of the United States, during the general suspension, and which now exists in some of the States. This truth has been practically demonstrated by the redemption of the whole of the Treasury Notes issued during the war, within the short space of about two years after the peace; whilst a large amount of bank notes issued during the suspension, are yet unredeemed, and greatly depreciated.

There can be no doubt that a metallic currency, connected with a paper circulation, convertible into specie, and not exceeding the demand for the facile transmission of money, is the most convenient that can be devised. When the paper circulation exceeds that demand, the metallic currency to the amount of the excess will be exported, and a liability to sudden fluctuations to the same extent will be produced.

If banks were established only in the principal commercial cities of each State; if they were restrained from the issue of notes of small denominations; if they should retain an absolute control over one half of their capital, and the whole of the credit which they employ, by discounting to that amount nothing but transaction paper payable at short dates, the credit and stability of the banks would, at least, be unquestionable. Their notes could always be redeemed in specie on demand. The remaining part of their capital might be advanced upon long credits to manufacturers, and even to agriculturists, without the danger of being under the necessity of calling upon such debtors to contribute to their relief, if emergencies should occur. Such debtors are, in fact, unable to meet sudden exigencies, and ought never to accept of advances from banks, but upon long credits, for which timely provision may be made. The latter class, of all others, is the least qualified to meet the sudden demands which a pressure upon banks compels them to make upon their debtors. The returns of capital invested in agriculture, are too slow and distant to justify engagements with banks, except upon long credits. If the payment of the principal should be demanded at other periods than those at which the husbandman receives the annual reward of his toil, the distress which would result from the exaction would greatly outweigh any benefit which was anticipated from the loan. That the establishment of banks, in agricultural districts, has greatly improved the general appearance of the country, is not denied. Comfortable mansions, and spacious barns, have been erected; lands have been cleared and reduced

to cultivation; farms have been stocked, and rendered more productive, by the aid of bank credits. But these improvements will eventually be found, in most cases, to effect the ruin of the proprietor. The farm, with its improvements, will frequently prove unequal to the discharge of the debts incurred in its embellishment. Such, in fact, is the actual or apprehended state of things, wherever banks have been established in the small inland towns and villages. Poverty and distress are impending over the heads of most of those who have attempted to improve their farms by the aid of bank credits. So general is this distress, that the principal attention of the State legislatures, where the evil exists, is, at this moment, directed to the adoption of measures calculated to rescue their fellow citizens from the inevitable effects of their own indiscretion. If, in affording a shield to the debtor against the legal demand of his creditor, the axe shall be applied to the root of the evil, by the annihilation of banks where they ought never to have existed, the interference, however doubtful in point of policy or principle, may, eventually, be productive of more good than evil.

The general system of credit which has been introduced through the agency of banks brought home to every man's door, has produced a factitious state of things, extremely adverse to the sober, frugal, and industrious habits which ought to be cherished in a republic. In the place of these virtues, extravagance, idleness, and the spirit of gambling adventure, have been engendered and fostered by our institutions. So far as these evils have been produced by the establishment of banks where they are not required; by the omission to impose upon them wholesome restraints; and by the ignorance or misconduct of those who have been intrusted with their direction, they are believed to be beyond the control of the federal government. Since the resumption of specie payments, measures have been adopted in some of the States to enforce their continuance; in others, the evil has been left to the correction of public opinion. There is, however, some reason to apprehend, that the authority of law may be interposed in support of the circulation of notes not convertible into specie.

But the federal government has, by its measures, in some degree, contributed to the spirit of speculation and of adventurous enterprise, which, at this moment, so strongly characterize the citizens of this republic. The system of credit, which, in the infancy of our commerce, was indispensable to its prosperity, if not to its existence, has been extended at a period when the dictates of sound discretion seemed to require that it should be shortened. The credit given upon the sale of the national domain has diffused this spirit of speculation and of inordinate enterprise among the great mass of our citizens. The public lands are purchased, and splendid towns erected upon them, with bank credits. Every thing is artificial. The rich inhabitant of the commercial cities, and the tenant of the forests, differ only in the object of their pursuit. Whether commerce, splendid mansions, or public lands, be the object of

desire, the means by which the gratification is to be secured, are bank credits.

This state of things is no less unfriendly to the duration of our republican institutions, than it is adverse to the development of our national energies, when great emergencies shall arise; for, upon such occasions, the attention of the citizen will be directed to the preservation of his property from the grasp of his creditors, instead of being devoted to the defence of his country. Instead of being able to pay with promptitude the contributions necessary to the preservation of the State, he will be induced to claim the interference of the government to protect him against the effects of his folly and extravagance.

This ought not to be the condition of a republic, when menaced by foreign force or domestic commotion. Such, it is apprehended, will be the condition of the United States, if the course which has been pursued since the commencement of the late war is not abandoned. Since that period, it is believed, the number of banks in the United States has been more than doubled. They have been established in the little inland towns and villages, and have brought distress and ruin upon the inhabitants. When the cause and the extent of the evil is known, no doubt is entertained that the appropriate remedies will be applied by those, who, in our complex form of government, are invested with the necessary authority.

But the resolution requires the Secretary of the Treasury "to report such measures, as, in his opinion, may be expedient to procure, and retain, a sufficient quantity of gold and silver coin in the United States."

It has already been suggested, that, if the currency was purely metallic, or connected with paper convertible into specie, to the extent only of the demand for the transmission of money, the United States would retain that proportion of the precious metals which the value of their exchangeable commodities bore to those of other States. But if paper can be made to circulate independent of its employment in the transmission of funds, gold and silver, to the same extent, will be exported. If paper will be received and employed generally as the medium of exchange, and especially if it is issued in bills of small denominations, the amount of specie which will be exported will be great in proportion to the paper in circulation. If this position be correct, the power of Congress will be insufficient to retain any considerable portionof gold and silver in the United States. Bank notes, from one dollar to those of large denominations, have circulated, and it is presumed will continue to circulate, independent of its authority. As long as bank notes will be received as a substitute for specie, the quantity of specie, necessary for currency, will be small, and may be easily retained without the aid of government. But the demand for specie, where the circulation is principally paper, is extremely fluctuating. When there is but little or no demand for it, the temptation to increase their discounts, by the issue of more paper, is too strong to be resisted by banks. When a demand for specie arises, the cur-

rency has to be suddenly diminished by the contraction of their discounts. Fluctuation in the amount of the currency, produced by this means, is the principal mischief to be remedied. These fluctuations will frequently occur in every State where the currency is principally paper convertible into coin. In the United States, where the specie exported as a primary article of commerce to the East Indies and to China, bears so large a proportion to the metallic currency of the country, they must not only be more frequent than in States where no such commerce exists, but more extensive in their effects. The demand created for Spanish milled dollars, by the exportation of specie, in the prosecution of this trade, has, without doubt, caused their importation to an extent which otherwise would not have occurred. As this demand is, in some degree, contingent, the supply will also be contingent. When it exceeds the demand, the banks will be tempted to new issues of paper. When it is deficient, the deficiency will be drawn from the banks, and will cause a sudden diminution of the currency. If this diminution could be limited to the amount of the deficiency thus drawn from the banks, the evil would be no greater than if the currency were metallic. But this is not the fact. When the paper circulation is returned upon the banks for specie, prudence requires that an effort should be made to preserve the same proportion between the specie in their vaults and their notes in circulation, as existed at the moment the pressure commenced. If the paper in circulation should be three times the amount of specie in the possession of the banks, a demand upon them for $1,000,000 of specie would produce a diminution of $3,000,000 in the currency, if the specie should be exported, and of $2,000,000 if it remained in the country. It is even probable that the comparative diminution would exceed this ratio. As the demand increased, apprehensions would be excited for the credit of the banks, the exertions produced by that apprehension would correspond with the magnitude of the evil to be avoided, rather than with the positive pressure. This, it is presumed, would be the effect of such an emergency, where banks had not become familiarized with bankruptcy, and were not countenanced by society in a course of conduct which in private life would be considered dishonest.

If, by any constitutional exercise of the power of Congress, banks can be restrained, 1st. From issuing notes of small denominations: and 2d. From excessive issues when their notes are not returned upon them for specie, fluctuations in the currency to an extent to derange the interests of society, may be prevented. But if the imposition of these restraints are not within the constitutional powers of Congress, the evils which have been suffered for the want of those restraints, must continue, until the present system of banking shall be abandoned.

In an inquiry into the state of the currency, the consideration of the coinage is necessarily involved. The principles upon which the coinage of the United States has been established, are substantially correct. The standard fineness of the gold coinage corresponds with the coinage

of England and Portugal. The standard of the silver coinage differs but little from that of Spain. The American dollar is intrinsically worth about one per cent. less than the Spanish milled dollar. This difference, if the Spanish dollar had not been made a legal tender, might have secured to the nation a more permanent use of its silver coinage. American dollars would not be exported, as long as Spanish dollars could be obtained for that purpose, at a reasonable premium. If this latter coin was not a legal tender, the banks might afford to import it, and might sell, at a fair premium, the amount which might be required of them for the China and East India trade.

The relative value of gold and silver has been differently established in different nations. It has been different in the same nation at different periods. In England, an ounce of gold is equal in value to about 15.2 ounces of silver. In France, it is equal to 15.5; and, in Spain and Portugal, to 16 ounces. In the United States, an ounce of gold is equal to 15 ounces of silver. But the relative value of these metals in the markets, frequently differs from that assigned to them by the laws of the different civilized States. It is believed that gold, when compared with silver, has been for many years appreciating in value; and now, every where, commands in the money markets, a higher value than that which has been assigned to it in States where its relative value is greatest. If this be correct, no injustice will result from a change in the relative legal value of gold and silver, so as to make it correspond with their relative marketable value. If gold, in relation to silver, should be raised five per cent., one ounce of it would be equal to 15.75 or $15\frac{3}{4}$ ounces of pure silver. This augmentation in its value would cause it to be imported in quantities sufficient to perform all the functions of currency. As it is not used to any considerable extent as a primary article of commerce, the fluctuations to which the silver currency is subject from that cause, would not affect it. It would be exported only when the rate of exchange against the country should exceed the expense of exportation. In ordinary circumstances, such a state of exchange would not be of long continuance. If the currency of the United States must, of necessity, continue to be paper, convertible into specie, an increase of the gold coinage, upon principles which shall afford the least inducement to exportation, is probably the most wholesome corrective that can be applied, after the rigid enforcement of that convertibility.

The copper coinage is believed to be susceptible of improvement. Copper itself is too massive to serve the purposes of change. One hundred cents are too cumbrous to be carried, and used in the numberless transactions which daily occur between individuals. Coin, compounded of silver and copper, of from one to ten cents, would be much more suitable for that object. This kind of coinage has been adopted in other countries, with great advantage.

It has, however, been objected to this coinage—

1. That, as compounded metals are much harder than the component ingredients, it would be difficult, and consequently expensive, to work.

2. That the coin itself would be of little or no intrinsic value: copper or brass being of superior value in the manufactures to which it might be applied: and that the public would scarcely submit to the circulation of a coin so worthless.

3. That it might be counterfeited by a composition of zinc and copper.

After giving to these objections their due weight, it is believed that a change of this nature, in the copper coinage, would be beneficial. Although the expense of such a coinage should be twice as much as that of an equal number of silver coin, still it might be advantageous. Small change, both of silver and copper, may be abundant in Philadelphia, the seat of the mint; but it is not generally so elsewhere. If it were, tickets of 6¼, 10, 12½, 25, and 50 cents, issued by mayors and corporation officers, and dollar bills torn in two pieces, for the purposes of change, would not be employed for that purpose. This single fact is an answer to the second objection. The fractional parts of a dollar are so indispensable in the transactions of individuals, that any thing which assumes that character will be employed. If the tickets, which, at this moment, form so great a portion of the change of this City, and of various other places, are employed for that purpose, it is inconceivable that the community should refuse to permit a compound coin of silver and copper to circulate, containing the intrinsic value which it represents, merely because for manufactures it will not be worth more than brass or copper, and that the expense of refining will be equal to the value of the silver. Change, that is, the fractional parts of a dollar, is so indispensable to the community, that its inapplicability to manufactures, and its exemption from liability to exportation, instead of forming objections, are recommendations in its favor.

The objection that this coin may be easily counterfeited, is, if it cannot be obviated, entitled to great consideration. As has been before stated, this compound coinage has been successfully practised in other States. If compound metals are much harder than their component ingredients, may not a sufficient security against counterfeiting be derived from that circumstance? The dimensions and power of the machinery, which constitute one of the objections to the coinage, will render it extremely difficult to secure that secrecy and concealment which are indispensable to the success of the counterfeiter. If this compound coinage should not be carried higher than ten cent or disme pieces, the inducement, compared with the danger of detection, resulting from the magnitude of the machinery, would not, it is believed, be sufficient to encourage counterfeiting. If, however, it should be deemed impracticable to guard against this evil, in a coinage composed of silver and copper, an attempt might be made to obtain a supply of small change, by a mixture of silver and zinc: the danger of counterfeiting would then be removed.

As various plans have been suggested during the last twelve months,

for alleviating the general distress which has prevailed, by the emission of a large amount of Treasury Notes, a few observations on that subject will close this part of the report.

If Treasury Notes are to be issued for this purpose, they will be either receivable in all payments to the government, or they will be made redeemable at a fixed period.

1. If they are made receivable in all payments to the government, the revenue will, from the time that $5,000,000 are issued, be substantially received in them. The government will be immediately unable to pay the interest and reimbursement of the public debt in specie, as it becomes due. These notes, when compared with the notes of the bank of the United States, will be at a discount. The latter notes, independently of their being every where receivable, in all payments to the government, are convertible, at the place of their issue, into specie. They are equal to the Treasury Notes in payment of the revenue, and superior to them, as they can command specie when the holder shall desire it.

If the 14th section of the bank charter was modified, so that the notes of the bank and of its offices should be receivable by the government, only when tendered where they are made payable, a small amount of Treasury Notes might be issued, and circulated, without depreciation. In that case, they would be used for the transmission of money, and would be in constant demand for that purpose. It is the reception of the notes of the bank of the United States, and its officers, by the government, wherever they are tendered, that causes them to be considered as a good remittance throughout the United States. If they should cease to be so received, a demand for Treasury Notes to a small amount, for the transmission of money, would be created, and would preserve them from depreciation. If the notes thus issued should be made redeemable at the Treasury, in specie, upon demand, the amount which might be put and retained in circulation would probably exceed, to a considerable extent, the sum demanded for the facile transmission of money. Such Treasury Notes would, however, have no advantage over the notes of the bank of the United States, as long as they are receivable in all payments to the United States, without reference to the place where they are payable. It is even probable that they would not be of equal value and currency with those notes, as the latter would generally be made payable in the principal commercial cities, where remittances are continually made, whilst the Treasury Notes would be payable only at this place. If Treasury Notes, payable in specie, on demand, when presented at this place, should be preferred to the notes of the bank of the United States, it would be in consequence of the abuses which have been practised by banking institutions, which have in some degree shaken the public confidence in the integrity of their direction.

2. If Treasury Notes were to be issued, not receivable in payments to the government, but redeemable at a fixed period, they would immediately depreciate, unless they bore nearly six per cent. interest. In the

latter case, they would be of little more use, as currency, than the funded debt. They would not perform the functions of money.

3. In any case whatever, whether they are receivable in payments to the government, or bear an interest, and are redeemable at a fixed period, they will afford no substantial relief where the distress is greatest, unless they should be advanced as a loan in order to alleviate that distress. If they are to be issued from the Treasury in discharge of the demands upon the government, they would never reach those sections of country where relief is most required. *There*, the government already collects more than can be expended. One of the causes of this distress is the necessity of transferring the public funds from those sections, for the purpose of being expended, to those where there is no deficiency of currency.

As a financial resource, the issue of Treasury Notes is justifiable only where the deficiency which they are intended to supply is small in amount, and temporary in its nature. As a measure of alleviation, it will be more likely to do harm than good. If a sufficient amount of those notes, of any description whatever, should be issued, and put into circulation where they are most wanted, unless they were given away, a debt in that part of the Union would be contracted to the extent of the issue. It might enable the borrowers to pay debts previously contracted, but their relative situation would be the same. Unless the currency became vitiated by the relief which was afforded, the ultimate payment of the debt would consummate the ruin which the measure was intended to prevent. But it is probable that the sums which might be advanced, by way of loan, would, in a great degree, be lost. The government is not, from its nature, qualified for operations of this kind. The general system of credit which has been introduced by the agency of banks, and by the inevitable effect of the measures of the general government, has produced an artificial state of things, which requires repression rather than extension. The issue of Treasury Notes, for the purpose of alleviating the general distress, would tend to increase this unnatural and forced state of things, and give to it a duration which it would otherwise never attain. If much of the evil resulting from a decreasing currency had not already been suffered, there might be some plausible reason for urging the issue of Treasury Notes as a measure of alleviation. This ground cannot be urged in its favor; it is, therefore, indefensible, upon the ground of expediency, as well as of principal.

The last member of the resolution assumes, by implication, the practicability of substituting, by the constitutional exercise of the powers of Congress, a paper currency for that which now exists.

In considering this proposition, the power of Congress over the currency of the United States cannot, consistently with the respect which is due to that body, be either affirmed or denied. It cannot be supposed that the House of Representatives, in adopting the resolution in question, intended, through the agency of an executive department of the govern-

ment, to institute an inquiry as to the extent of the constitutional authority of a body, of which it is only a constituent member. Yet it will necessarily occur to the House, that, if the power of Congress over the currency is not absolutely sovereign, the inquiry, whatever may be its immediate result, must be without any ultimate utility. The general prosperity will not be advanced, by demonstrating that there is no intrinsic obstacle to the substitution of a paper for a metallic currency, if the power to adopt the substitute has been withheld from the federal government. Without offering an opinion upon the weight to which these views would have been entitled, had they been urged whilst the resolution was under consideration, it is admitted that they furnish no ground for declining the performance of the duty imposed by its adoption. In the discussion of a question of so much delicacy and importance, the utmost confidence is reposed in the justice and liberality of those who have rendered it indispensable.

At the threshold of this inquiry, it is proper to observe, that it is deemed unnecessary to present an analysis of the motives which led, even in the most remote antiquity, to the general adoption, by civilized States, of gold and silver as the standard of value; or of the advantages which have resulted from that adoption. The circumstance to which, in the course of this investigation, it will be necessary to advert, is the tendency which a metallic currency has to preserve a greater uniformity of value, than any other commodity; and the facility with which it returns to that value, whenever, by any temporary causes, that uniformity has been interrupted. No argument will, in this place, be offered in support of this proposition. It is founded in the experience of all nations. Its truth, for the present, will therefore be assumed. But, the proposition itself admits that gold and silver, when employed by the consent of all civilized States, as the standard of value, are subject to temporary variations of value, It is equally true, that they are subject to permanent variations. The cause and effect of these changes will be considered previously to the discussion of the practicability of substituting a paper for a metallic currency.

1st. When, by any circumstance whatsoever, a greater portion of these metals is found in a particular State, than is possessed by other States having articles of equal value to be exchanged, they will, in such State, be of less value than in the adjacent States. This will be manifested by an increase in the price of the commodities of such State. This increase of price will continue until the metallic redundancy is exported, or converted into manufactures. Whenever this redundancy is disposed of, the currency will return to its former value; and the price of other commodities will be regulated by that value.

2d. But the exportation of specie may take place where there is no such redundancy. This occurs whenever the general balance of trade continues, for some time, unfavorable to a particular State. The currency then appreciates in value; and the price of all other commodities in such State is diminished. As commerce is nothing more

than the exchange of equivalents, the reduction in the price of the articles of such State, and the increased value of the currency, will promptly produce a reaction; and gold and silver will soon return in the quantities required to reduce their value to that which they maintain in the adjacent States. With the return of specie, all other articles will return to the prices which they commanded before its exportation. Like fluids, the precious metals, so long as they are employed as the general measure of value, will constantly tend to preserve a common level. Every variation from it will be promptly corrected, without the intervention of human laws. These fluctuations, being temporary in their nature, are wholly independent of the permanent causes which may affect the value of gold and silver, when employed as the general standard of value. They will equally occur, whether the quantity of these metals, compared with the exchanges which they are destined to effect, be redundant or deficient. The limits, however, within which these fluctuations are confined, are so contracted, that the great interests of society cannot be seriously affected by them. But this observation must be understood to apply to a currency purely metallic, or, at least, when the paper which is connected with it does not exceed the demand for the convenient transmission of money.

3d. Gold and silver, when employed by the common consent of nations as the standard of value, are subject to variations in value from permanent causes. When their quantity is increased more rapidly than the articles which are to be exchanged through their agency, their price will fall; or, what amounts to the same thing, the price of all exchangeable articles will rise. It has been admitted by all intelligent writers upon this subject, that, immediately after the discovery of America, towards the close of the fifteenth century, a sudden and extensive depreciation in the value of these metals occurred; and that, from that time, to the close of the eighteenth century, they continued gradually to depreciate. This depreciation, it is believed, has been accelerated during the last century, as much by the substitution of paper for specie, as by the increase in the quantity of those metals during that period, beyond the demand which would have existed for them, as currency, had that substitution not taken place. The precise effect upon the depreciation of these metals, produced by the partial substitution of paper, in various countries, for a metallic currency, will not now be inquired into; but it is generally conceded, that the depreciation has been more rapid since that substitution, than at any former period; except when the accumulated stock of ages in the new world was brought into Christendom, and thence distributed into every other region where gold and silver were in demand. Since the close of the last century, doubts have existed, whether those metals, even when employed as currency, have not appreciated in value: and it is contended, by the advocates of a paper currency, that this appreciation will probably continue through a long succession of years, and seriously affect all the operations of the civilized

world. It is maintained by these writers, that the demand for currency, at present, throughout the world, is greater than the supply which the existing quantity of the precious metals will afford, without materially depressing the price of all the objects of human industry and human desires. When it is recollected that production is regulated by demand, and that both are directly affected by the quantity of currency compared with the quantity of articles to be exchanged; it is readily perceived, that an increase in the currency of the world by the substitution of paper, even when convertible into coin, will increase the quantity of exchangeable commodities in the world beyond what would have existed had such increase of currency not taken place. Under such circumstances, a sudden reduction of the currency, by the rejection of the paper which had been employed, could not fail to derange all the relations of society, by diminishing the quantity of currency, whilst the articles to be exchanged through its agency would suffer no such diminution. An immediate depression in the price of all commodities would be the inevitable consequence of an unqualified return to a metallic currency, upon the supposition that the quantity of gold and silver, annually produced, should remain undiminished. But, if this return to a metallic currency, should be attempted at a period when the annual product of these metals, either from temporary or permanent causes, should have considerably decreased, all the great interests of society would be most seriously disordered; property of every description would rapidly fall in value; the relations between creditor and debtor would be violently and suddenly changed. This change would be greatly to the injury of the debtor: the property, which would be necessary to discharge his debts, would exceed that which he had received from his creditor; the one would be ruined without the imputation of crime, whilst the other would be enriched without the semblance of merit. Until the engagements existing at the moment of such a change are discharged, and the price of labor and of commodities is reduced to the proportion which it must bear to the quantity of currency employed as the medium of their exchange, enterprise of every kind will be repressed, and misery and distress universally prevail. When this shall be effected, the relations of society, founded upon a new basis, will be equitable and just, and tend to promote and secure the general prosperity.

Such, it is contended by the advocates of a paper currency, are the circumstances under which the principal States of Europe are endeavoring to return to a metallic currency. For a century past, the currency of those States has been greatly increased by the employment of paper, founded, it is true, originally upon a metallic basis. During the last twenty years, this paper has ceased to be convertible into specie; and, as no systematic effort has been made to prevent excessive issues, it has become redundant, and consequently depreciated. Notwithstanding this depreciation, the productions of those countries, it is believed, have more rapidly increased, than those of countries where a metallic currency

has been preserved. The first efforts that are seriously made by those States to return to a metallic currency, will be the repression of enterprise of every descripiion among themselves. It will be foreseen that the currency must appreciate, and that all other articles must depreciate in value. The effects of this appreciation of money will be first manifested in those States, by the fall of the price of all articles which cannot be exported. In the progress of these measures, the price of the exportable articles will also be affected, by the reduction in the currency employed in effecting their exchange. It is even probable that the quantity of exchangeable articles will be diminished. Whilst the appreciation of the currency is perceptibly advancing, the manufacturer will not hazard his capital in producing articles the price of which is rapidly declining. The merchant will abstain from purchasing, under the apprehension of a further reduction of price, and of the difficulty of re-vending at a profit. It is even probable that the interest of money will fall, whilst the cry of a scarcity of money will be incessant. Under such circumstances, loans will not be required, except to meet debts of immediate urgency. None will be demanded for the prosecution of enterprises by which the productive energies of the community will be increased.

As the measures which have been adopted by England, and several of the continental States of Europe, for returning to a metallic currency advance, the interests of those States, which have adhered to it, will be affected. Whilst gold and silver were, in the former States, dispensed with as coin, they were sought for merely as commodities. The quantity necessary for their manufactures was readily obtained, without deranging, in any serious degree, the currency of other States.

It has been estimated, that from eighty to one hundred and twenty millions of dollars were necessary to England. Taking the mean sum, and admitting that the other European States engaged in the same effort, require an equal amount, a supply of two hundred millions of dollars is necessary. The commencement of the measures necessary to obtain that portion of this sum, which cannot, in a short time, be drawn from the annual product of the mines, may not be immediately felt by other States. But, when these measures approach their completion; when a large quantity of gold and silver is necessarily withdrawn from the currency of other States, the price of specie will, in the latter, appreciate, and the price of all commodities will decline. All the evils incident to an appreciating currency will be felt in those States, though in a less degree than where a paper currency had been exclusively adopted. The example presented by the return to a metallic currency in France, even in the midst of a revolution, which probably had some influence upon the decision of this question by other States, is believed to be, in no degree, analogous in its principal circumstances. At the precise period that this change was operating, England, and the principal continental States, abandoned the precious metals as currency. The supply demanded by France, was not only at hand, but was seeking the

very employment which that change had made indispensable. At the same time, immense sums were brought into France by her conquering armies, which, being raised by military contributions, had, in some degree, rendered a resort to paper currency in the invaded States necessary. At present the civilized world is at peace, and each State is endeavoring, by systematic measures, to secure to itself a just participation of the benefits of equal and reciprocal commerce. The States which are now attempting to return to a metallic currency, will find much greater difficulty in effecting this change than was experienced by France.

The demand for gold and silver, as the medium of exchange, cannot be supplied until the price of all exchangeable articles has fallen in proportion to the reduction of the currency, which the abandonment of paper must produce. It is even probable, as has been before suggested, that, after the price of commodities and of labor shall have fallen, so as to bear a just proportion to the currency which is to be employed in effecting the necessary exchanges, that the currency will continue gradually to appreciate. This, however, is matter of conjecture. It depends entirely upon the fact, whether the annual produce of the mines, after furnishing the quantity necessary for the consumption of the precious metals in manufactures, will be equal to the increased demand for currency, arising from the increase of exchangeable commodities throughout the world. The great advancement in the arts and sciences—the rapid improvement in machinery, which characterize the present age, acting through a long succession of ages, cannot fail to augment, in an astonishing degree, all the products of human industry.

It may, however, be urged, that the same improvements will augment, in an equal degree, the product of the mines; and that, therefore, the quantity of the precious metals in the world will continue to bear, to other commodities, the same relation which they may assume when the return to a metallic currency is effected. This may be true; but, so far as it depends upon the general principle, that the supply of all articles is regulated by the demand, there is reasonable ground of doubt. The maxim, although good as a general rule, admits of exceptions. A demand beyond the supply, increases the price of the thing demanded, and invites to the investment of additional capital in its production. But, when the article demanded is to be produced from a material which no investment of capital—no application of skill can augment, the only effect of such investment and application is, to produce the most which the material has the capacity to furnish. Such, in fact, is the case of gold and silver. The material from which they are made, is limited in quantity, which neither capital nor skill can augment. It is probable that the improvements in machinery, and the art of refining, will be counterbalanced by the exhaustion of the mines, or the difficulty of working them, arising from the depth and extent of their excavations. It is therefore possible, that the demand for the precious metals, for currency and for manufactures, may exceed the production of the mines.

Previously to entering upon the immediate discussion of the practicability of substituting a paper for a metallic currency, it is proper to observe, that gold and silver derive part of the uniformity of value which has been ascribed to them, from the general consent of civilized States to employ them as the standard of value. Should they cease to be used for that purpose, they would become more variable in their value, and would be regulated, like all other articles, by the demand for them, compared with the supply in any given market. It is presumed, that, if they should cease to be employed as the standard of value by several States, their uniformity of value would be in some degree affected, not only in those States where they were considered as mere commodities, but in those where they were still employed as currency. Whenever, as commodities, they should rise in value, a drain would take place from the currency of other States; and when they should fall in value, as commodities, they would seek employment as currency, and render in some degree redundant the currency of the States where they are employed. After making due allowance for the depreciation of bank notes in England, from the time of the bank restriction, in 1797, to the present period, the price of gold and silver in that country is believed to have varied more than at any former period. Their price, when compared with bank notes, from the year 1797 to 1808, showed but a slight degree of depreciation; considerably less, in all human probability, than actually existed. During that interval, the demand for those metals was limited in England to the sum required for manufactures. It is highly probable, that if the quantity of the paper circulation had been reduced to the amount of the currency in circulation at the time, or for one year before the restriction, the price of bullion would have been below the mint price. On the contrary, in the year 1808, when the employment of a British force in Spain created a sudden demand for specie, the depreciation of bank notes, indicated by the price of bullion, was probably greater than that which really existed. In the year 1814, after the treaty of Paris, the price of bullion, estimated in bank paper, was not above the mint price; whilst in the succeeding year it rose to more than twenty per cent. above that price: the amount of bank notes in circulation at the former, exceeding, in a small degree, that of the latter period. It is impossible that these variations in the price of gold and silver, in the short space of one year, can be entirely chargeable to the depreciation of bank notes. The effect which these variations, in a great commercial State, where the precious metals were considered only as commodities, were calculated to produce upon the currency of the neighboring States, has not been ascertained. The convulsions to which most of these States were subject during that period, may account for the want of sufficient data to elucidate the subject. It is, however, highly improbable that these fluctuations were not sensibly felt by them.

Having considered the nature and extent of the variations in value to which a metallic currency is necessarily subject, it remains to examine whether it is practicable to devise a system by which a paper currency may be employed as the standard of value, with sufficient security against variations in its value, and with the same certainty of its recovering that value, when, from any cause, such variations shall have been produced. It is distinctly admitted that no such paper currency has ever existed. Where the experiment has been made directly by government, excessive issues have quickly ensued, and depreciation has been the immediate consequence. Where the experiment has been attempted through the agency of banks, it has invariably failed. In both cases, instead of being used as a mean of supplying a cheap and stable currency, invariably regulated by the demand, for effecting the exchanges required by the wants and convenience of society, it has been employed as a financial resource, or made the instrument of unrestrained cupidity. In no case has any attempt been made to determine the principles upon which such a currency, to be stable, must be founded. Instead of salutary restraints being imposed upon the monied institutions which have been employed, the vital principle of whose being is gain, they have not simply been left to the guidance of their own cupidity, but have been stimulated to excessive issues, to supply deficiencies in the public revenue. This is known to have been the case, in an eminent degree, in the experiment which has been attended with most success. The issues of the Bank of England, on account of the government, were frequently so great as to destroy the demand for discounts by individuals. In consequence of these excessive issues, the interest of money fell below five per cent., the rate at which the bank discounted; the demand for discounts at the bank therefore ceased. It is, indeed, not surprising, that no systematic effort has been made to restrain excessive issues. In the case of banks, the experiments which have been made were intended to be temporary; they were the result of great and sudden pressure, which left but little leisure for the examination of a subject so abstruse. The employment of a paper circulation, convertible into specie, the favorite system of modern States, having, as has been attempted to be shown in a previous part of this report, the inevitable tendency to produce the necessity of resorting in every national emergency to paper, not so convertible, imposes upon those who are called to administer the affairs of nations the duty of thoroughly examining the subject, with a view, if practicable, to avoid that necessity. If the examination does not result in the establishment of a paper currency, unconnected with specie, it may lead to the imposition of salutary checks against excessive issues, when the necessity of suspending payment may occur.

It has already been said, that every attempt which has been made to introduce a paper currency has failed. It may also be said, that of all the systems during the discussion of this interesting subject, both in Europe and the United States, which have been proposed, none are free

from objections. It is possible that no system can be devised, which will be entirely free from objection. To ensure the possibility of employing such a currency with advantage, it is necessary—

1. That the power of the government over the currency be absolutely sovereign:
2. That its stability be above suspicion:
3. That its justice, morality, and intelligence, be unquestionable:
4. That the issue of the currency be made not only to depend upon the demand for it, but that an equivalent be actually received:
5. That an equivalent can only be found in the delivery of an equal amount of gold or silver, or of public stock:
6. That whenever, from any cause, it may become redundant, it may be funded at an interest a fraction below that which was surrendered at its issue.

1. This proposition needs no elucidation. Coinage, and the regulation of money, have, in all nations, been considered one of the highest acts of sovereignty. It may well be doubted, however, whether a sovereign power over the coinage necessarily gives the right to establish a paper currency. The power to establish such a currency ought not only to be unquestionable, but unquestioned. Any doubt of the legality of the exercise of such an authority could not fail to mar any system which human ingenuity could devise.

2. A metallic currency, having an intrinsic value, independent of that which is given to it by the sovereign authority, does not depend upon the stability of the government for its value. Revolutions may arise; insurrections may menace the existence of the government; a metallic currency rises in value under such circumstances; it becomes more valuable, compared with every species of property, whether moveable or immoveable, in proportion to the instability of the government. Not so with a paper currency: its credit depends, in a great degree, upon the confidence reposed in the stability of the authority by which it was issued. Should that authority be overthrown, by foreign force or intestine commotion, an immediate depreciation, if not an absolute annihilation, of its value, would ensue.

3. It might, however, be saved from such destruction by a well grounded confidence in the justice and intelligence of the government which should succeed that which has been overthrown. The history of modern times furnishes examples that are calculated to inspire this confidence. In France, during the revolution which has just terminated, the public debt was reduced to one-third of its amount. The same rule was applied to the public debt of the Dutch republic, when it fell under French domination. In the successive political changes to which France has, since that period, been subjected, the public debt and the public engagements have been maintained with the strictest good faith. In Holland, that portion of the public debt which had been abolished by the French government has been restored. In the opinion of well

informed men, however, the conditions connected with that restoration, were so onerous as to render it almost nominal. Indeed, the public debt in that country had become so disproportionate to the means of the nation when deprived of the resources it enjoyed when the debt was contracted, that the reduction which it underwent while the country was annexed to the French empire, was not generally considered an evil. The reduction of the national debt of France during the revolution was perhaps equally indispensable. If the intelligence of the age, and the influence of public opinion, even in States where the reign of law was but imperfectly established, have been sufficient to induce the governments which have alternately succeeded each other for the last twenty-five years, in France and Holland, to respect the public engagements which had been previously contracted, well grounded expectations may be cherished that the period is rapidly passing away when the public faith of nations can be violated with impunity.

If public engagements, under such circumstances, have been considered obligatory upon those who have successively administered the affairs of those nations, a reasonable confidence may be reposed in the fulfilment of the obligations which may be contracted by existing governments, where the reign of law is firmly established. It is not denied that a paper currency furnishes strong temptations to abuse. Millions may be issued in a few days; and the deficiencies in the revenue promptly supplied, if the condition of receiving an equivalent is abandoned. The moment the currency shall be issued as a financial resource, depreciation will follow, and all the relations of society will be disturbed. If the government of the nation in which a paper currency has been established, shall be deeply impressed with this truth, will it not be restrained from the apprhended abuse? Currency of every kind is liable to great abuses. The history of the coinage of every nation whose annals are known, is little more than a detail of the frauds which have been practised by governments upon the people. Until the twentieth year of the reign of Edward III. of England, a pound-troy of silver of standard fineness, and a pound sterling, were synonymous terms: twenty shillings sterling being in fact a pound-troy of standard silver. Change followed change in rapid succession, until, in the reign of Elizabeth, a pound-troy of standard silver was directed to be coined into sixty-two shillings. This immense change in the value of the currency was effected in the space of about two centuries. In other modern States, during the same period, changes not less important occurred in the coinage. Frequently these changes were effected by deteriorating the standard fineness of the coin. For more than a century past, the coinage of the civilized world has undergone no material change with a view to the practice of fraud upon the people. Whether this forbearance is to be attributed to an improvement in the morality of modern governments, or to a more correct understanding of the principles of currency, and of the consequences that must result from every change by which the relations of the society

are affected, it furnishes just ground of expectation that they will not hereafter be attempted. Nothing more is necessary to secure an unalterable adherence to the maxims upon which it is manifestly necessary that a paper currency must be founded, in order to preserve an uniformity of value, than the same morality and the same intelligence. Without assuming the principle of the perfectibility of human nature, the hope may be indulged, that the nature of currency will continue to command the attention of statesmen, and that the abuses which have resulted from improper changes in the currency, will not again occur in the same degree.

4. When the currency is metallic, no addition can be made to it without giving an equivalent. It is indispensable that this condition should be annexed to the acquisition of the paper currency, preliminary to its entering into circulation. If it can be put in circulation, only on paying its nominal amount in that which has a general and fixed value, determined by the consent of other nations, it will continue to preserve that value during the time it circulates, unless the relation which it bore at the time of its issue, to the quantity of articles, the exchanges of which it is destined to perform, shall be varied.

5. As a paper currency is issued upon the national credit, the whole property of the nation is pledged for its redemption, whenever, by any circumstance, it may become the interest of the community that it should be redeemed. It is therefore manifest, that it should not issue upon the credit of any individual, or association of individuals. A part can never be equal to the whole. The credit of any individual, or association of individuals, cannot be equivalent to that of the nation of which they form a part. But it may be said, that although the credit of individuals is not equivalent to the credit of the nation, yet an equivalent for a particular portion of that credit may be found in the pledge or mortgage of property of equal or greater value than the currency issued upon it. This may be true; but the value of property has been continually fluctuating: it will continue to fluctuate, after giving to the advocates of a paper currency full credit for the superior stability which they suppose will attend its substitution for gold and silver as the standard of value. But this is not the only objection to the acceptance of property as a pledge for the payment, by individuals, of an equivalent for the paper currency which may be advanced upon such pledge. Frauds will be practised by pledging property which is encumbered, which it would be extremely difficult to detect. The government will be involved in endless litigation with individuals who are interested in the encumbrances by which its rights to the property pledged is embarrassed. In such contests, the interest of the government is always endangered, even where right is on its side. It is not qualified to enter into such litigations with an equal chance of success. The feelings of the community are always, except in flagrant cases of fraud, upon the side of an individual supposed to be struggling with the overwhelming influence of authority. Besides, in

all contests of this nature, something of the respect for the government which ought to be cherished by the citizens, especially of a free State, will be lost. The situation is invidious, and ought not voluntarily to be assumed by a government jealous of its dignity and purity of character. It is therefore believed, that a national currency cannot be issued with safety, with a reasonable prospect of success, and with sufficient security against redundancy, but in exchange for gold and silver of a definite standard, or for the public stock at certain fixed rates. When issued in exchange for them, and for them alone, there is, though not the same, yet perhaps an equal security against redundancy, as in the case of a metallic currency. When it is issued in exchange for coin, there is no addition made to the currency. When it is issued in exchange for public stock, commanding previously to the exchange its par value in coin, the party who acquires the currency, parts with that which was equal to specie, and is deprived of the annual interest which it produced. Unless the interest of the currency resulting from its scarcity, should exceed that paid upon the stock, it would not be demanded in exchange for the stock. In either case, the danger of redundancy is extremely remote. By the exchange of specie for currency, the active capital of the country will be increased to the amount of the currency; and the capacity of the nation to redeem it, whenever it shall by any circumstance whatever become expedient, will be unquestionable.

But it may be doubted whether, under such conditions, a paper currency ever can be put in circulation. Under a government firmly established, conducted by upright and enlightened councils, and possessing absolute power over the currency, it is believed there is no just reason to apprehend a difficulty of that nature. If, in such a government, banks existed, deriving their powers from it, the specie in their possession would be gradually exchanged for the paper currency which would become the basis of their operations. Not only the specie which they possessed would be thus exchanged, but exertions would, from time to time, be made to acquire the sums necessary to support their banking operations. Specie would be imported, even at an expense, for the purpose of being exchanged. Whilst specie formed the basis of the operations of banks, its importation could not fail to be productive of loss. Each importation not only produced the necessity of additional importations, but at an increased expense. But, when importations shall be made for the purpose of being exchanged for the currency, the exportation of the specie thus imported will not affect the operations of the banks. It is only when the funding of the currency shall commence, that they will be admonished to desist from further importations. Individuals and banks would likewise exchange public stock at the rates prescribed by the system for the paper currency. Whenever the demand for currency should be such as to raise the interest of money considerably above that produced by the public stock, it would by banks and individuals be given in exchange for the currency.

But the facility which the existence of a public debt furnishes in procuring the paper currency, is counter-balanced by the difficulty of complying with the public engagement to discharge such debt in a metallic currency After a paper circulation shall be substituted for gold and silver, they will be found in the country only in the quantity demanded for manufactures, and for such branches of commerce as are entirely dependant upon them. A considerable demand for gold and silver by the government, to meet its engagements, previously contracted, would raise their price in the market, and render the obligation to discharge those engagements in the precious metals, not only extremely onerous, but perhaps sometimes impracticable. In such a state, a compromise with the public creditors, would seem to be a preliminary measure. This, under any circumstances, would be a measure of great delicacy and difficulty, and, in some cases, would probably be utterly impracticable.

6. Whenever, from any cause, the currency should become redundant, the redundancy may be funded at a rate of interest a fraction below the rate of legal interest.

In determining the rate at which it may be funded, due regard should be paid to the rate of interest previously existing in the State. The rate of interest, it is conceived, ought not to depend, and, where a metallic currency prevails, does not depend solely upon the amount of currency necessary to perform, with facility, the exchanges required by the wants and convenience of society. In a new country, where there is but a slight accumulation of capital, the interest of money will be high, notwithstanding there may be even a redundancy of currency beyond what is necessary to effect its exchanges. In such a country, all the objects upon which capital may be employed, except those of the most simple kind, are unoccupied. The currency necessary to effect the exchanges of its property, moveable and immoveable, will be entirely insufficient to satisfy the demand for capital for those objects. If it should be multiplied, so as to equal that demand, it would exceed the demand for the necessary exchanges of society, and consequently depreciate. Such, in fact, it is believed, would be the consequence of issuing the currency upon individual credit, or upon the pledge of property at a rate of interest below that which previously existed in the State. Any change of the interest of money by law, previous to its having taken place in individual transactions in consequence of the accumulation of capital, would be unjust, and could not fail to produce serious inconvenience to the community. Admitting the rate of interest, in a state about to make the experiment, to be six per cent., then the currency should be issued only in exchange for specie, or six per cent. stock, or other stock according to that ratio. If the currency should, when, by any means, a redundancy existed, be fundable at five and a half per cent. interest, the utmost depreciation to which it could be subject, would be eight and one-third per cent. But it is probable that the real

depression in its value would not, at any time, be more than half that amount. Before funding would commence, the public stock, receivable in exchange for the national currency, would be above the rates at which it was receivable. Its issue upon the exchange of stock would, therefore, have ceased. There are, in every community, capitalists who would prefer lending to the government at five and a half per cent. than to individuals at six. The funding of the currency would, therefore, begin before the redundancy would offer any general inducement to that mode of reducing it. The variation to which its value would be subject, would therefore be less than eight and one-third per cent. It would be the interest of the government to reserve the right of redeeming the stock created by funding, at its par value; under the condition, however, of redeeming it according to the order of time in which it was created. Connected with this system, should be a permission to the banks to purchase public stock, but not to dispose of it, except to the government, at its par or current value, when under par, unless the government should decline the purchase. The currency, upon being funded, should be invariably cancelled. Under a system of this kind, if no other paper was permitted to circulate than the national currency, a redundancy which would affect its value, could only occur by a temporary diminution of the articles which were to be exchanged through its instrumentality. In that event, the price of the articles would be enhanced, so as to require a greater amount of currency to effect their exchange. Should the price not be enhanced, in proportion to the diminution in the quantity of the articles, that portion of the currency which would, under such circumstances, be left without employment, would be funded. A just relation between the amount of currency, and the demand for it, would be promptly restored, without affecting, injuriously, the relations between individuals. On the other hand, should a greater quantity of exchangeable articles be produced, the demand for currency would exceed the supply, and lead immediately to additional issues, until the necessary supply should be obtained.

But, in a State where banks already existed, which derived their charters from the sovereignty that regulated the currency; where the people were accustomed to bank notes, and in the habit of receiving them, the agency of these institutions might be admitted in supplying a portion of the currency. They might be permitted to issue their notes, payable on demand, in the national currency. Their notes would, of course, be issued on personal security. In this case, the currency might become redundant by the issues of the banks. Whenever this should happen, the national currency would be demanded of them for the purpose of being funded; the banks would be compelled to curtail their discounts, to relieve themselves from the pressure, and the amount of the currency would be promptly reduced to the legitimate demand. Wherever the agency of banks should be employed in furnishing part of the circulation, a refusal, or omission, to discharge their notes on

demand, in the national currency, should be treated as an act of bankruptcy. The national currency being a legal tender in the payment of debts to individuals and to the government, would, in relation to the banks, perform the functions of specie, where bank notes are convertible into coin. But, in order to impose a salutary check against excessive issues of bank notes, the national currency should alone be receivable in all payments to the government.

In an attempt to trace the probable results of a paper currency, founded upon the principles which have been developed in the preceding pages, the influence which it will have upon foreign exchange requires investigation. The want of stability, morality, and intelligence in the government, which may undertake to substitute a paper for a metallic currency, are the objections which have already been considered. To these, according to common opinion, is to be added, the injurious effect which it is supposed it will have upon foreign exchange. In a country where the currency is metallic, an unfavorable state of foreign exchange will probably have the following effects:

1st. To raise the price of exportable articles as much above that which they ought to bear, as the premium paid upon foreign bills, until it exceeds the expense of exporting specie to the foreign market.

2d. When this rise exceeds the expense of such exportation, the price of exportable articles will fall gradually below what they ought to command, to the extent of that excess.

3d. Until this fall in their price shall be effected, specie will be exported; after which it will cease.

4th. This fall in their price, by increasing their consumption in the foreign markets, ultimately provides for the return of the specie which had been exported.

5th. During the second and third stages of this process, the price of all articles not exportable, is affected in a greater degree; enterprise is damped, and distress prevails.

Such are the necessary effects of an unfavorable state of foreign exchange, where the currency is metallic. As the vital principle of commerce is gain, it is probable that, generally, the price of exportable articles would, in fact, be rather higher than is stated in the preceding deductions; the timid might export specie, before the premium upon exchange exceeded the expense of its exportation; but timidity is not the predominant characteristic of commercial enterprise. On the other hand, the sanguine and enterprising, relying upon the chance of better markets, would give higher prices rather than submit to certain loss upon the exportation of specie, or the purchase of bills above par.

In a country where a paper currency has been adopted, and the principles by which a redundancy may be prevented have been enforced, an unfavorable state of foreign exchange will probably have the following effects:

1st. The effect of raising the price of exportable articles, as much

above what they ought to bear, as equals the premium upon foreign bills. But, in this case, gold and silver, being exportable articles, will rise in the same proportion as all other articles.

2d. When the price of all articles is raised so high, that a loss will be incurred by their sale in foreign markets, those who have no remittances to make will withdraw from the competition. If profitable investments in other enterprises cannot be made, a portion of the currency, at their disposition, will be withdrawn from circulation, by being converted into funded stock; competition will, in this manner, be diminished; the price of articles for exportation will be reduced by the reduction of the currency, and by diminished competition among the purchasers. It is not probable, however, that the price will fall so low as to admit of a profit in foreign markets, as long as the premium upon exchange continues above the ordinary commercial profit upon exported articles. But exportation will not be continued at a certain loss, longer than the discharge of debts previously contracted renders indispensable; foreign articles will not be imported, when the loss upon remittances, whether made by bills of exchange, or by the exportation of commodities, is equal to the profit upon importation; the high price given for exportable articles will increase their production, and restore foreign exchange to a favorable state. The balance of trade, and the rate of foreign exchange, which have given so much trouble to statesmen for two centuries past, when left to the laws by which they will be governed, in despite of human devices, as invariably regulate themselves as fluids when unrestrained find their common level. They will, probably, more promptly conform to these laws in a State where a well regulated paper currency prevails, than where it is metallic. In the latter, the currency is exported to make up any temporary deficiency, and by that means provides against the recurrence of the evil, by indirectly causing an increase of the exportable articles of the State, and diminishing the importation of foreign articles. Until the capacity to purchase these by the exchange of articles shall be restored in the former, as the currency cannot be exported, the importations will be more promptly reduced to the capacity of the country to purchase, whilst the increase of its exportable articles will be the direct, instead of the indirect consequence, of a temporary incapacity to pay for previous importations.

3d. During the whole process of restoring a favorable state of exchange, in a country where a well regulated paper currency prevails, the price of all articles, not exportable, will suffer no material variation. The funding of the currency, which will probably take place, will not be immediately carried so far as to reduce the price of exportable articles so as to command a profit in foreign markets. They will, so long as the rate of exchange is unfavorable, continue to command higher prices than when the exchange is favorable. This increased price will encourage industry and enterprise, and constantly tend to augment the productive energies of the community. This effect cannot fairly be attributed to

any depreciation in the currency. That will continue to bear nearly the same proportion to the exchangeable articles of the State, as when foreign exchange was favorable. It is probable even that its relation to those articles will be changed, so as to produce an appreciation of the currency; and that this appreciation will be perceived, in a slight degree, in the depression of the value of all articles not exportable. The effects of this appreciation will, however, be diminished by the impulse given to industry and enterprise, by the increased price of all articles which can be exported.

These are conceived to be the effects which a well regulated paper currency will have upon the foreign exchanges, and upon the domestic industry of the country which may adopt it. If the value of currency depends, like that of all other articles, upon the quantity compared with the demand, the idea of its depreciation in raising the price of articles in the case which has been considered, must be rejected. That this position is incontrovertible, seems to have been admitted by all writers upon the subject. This admission is found in the reports which have been made to the British Parliament, in the evidence upon which those reports have been founded, and in the essays of those who have opposed the paper system in that country, since the year 1797. The objection to the paper system, as it existed in England, was the absence of all restraint upon the issue of paper, and the supposed impossibility of imposing any efficient restraint. In fact, no attempt has been made to impose such restraint in that country, unconnected with the convertibility of bank notes into the precious metals. So far as this restraint is limited to the convertibility of bank notes into bullion, at any given rate, it is rather an attempt to regulate foreign exchange through the instrumentality of the bank, than to confine the issue of bank notes to the sound demand for currency. The restraint imposed seems to rest upon the idea, that an unfavorable state of foreign exchange must be the result of a redundant currency. Nothing can be more incorrect than this hypothesis. Considering the vitiated state of the currency of England for more than twenty years past, it is not surprising that this idea should there be entertained. During that period, the unfavorable rate of foreign exchange which generally prevailed, was, if not directly, at least indirectly, attributable to the depreciation of their currency. But, in this interval, a favorable rate of foreign exchange more than once occurred. To what could this favorable exchange be attributed? Certainly not to the depreciation of their currency. But it would be as unjust to attribute every unfavorable state of foreign exchange to the depreciation of the currency, as to ascribe to that currency the credit of any favorable state of such exchange. The truth is, that fluctuations in the exchange, between two countries having a metallic currency, continually occur, and depend upon principles wholly unconnected with the idea of a depreciated currency.

If these views be correct, the only obstacles to the establishment of a

paper currency, by a government having a sovereign right to establish it, is the danger of the instability and want of integrity and intelligence of the government. There is, certainly, just reason to apprehend that emergencies may arise in the affairs of every nation, in which their stability may be menaced, by foreign force or domestic insurrection. In such an event, a panic might ensue, and the credit of the currency be utterly annihilated. How far the recent examples which have been adverted to in other States—how far the influence of public opinion over the conduct of governments, may be relied upon, as an efficient preventive against evils of such magnitude, must be determined by those to whom, under Divine Providence, the prosperity and happiness of nations are committed. The subject involves all the complicated interests of society, except the enjoyment of civil, political, and religious liberty. It ought to be approached with more than ordinary circumspection. In States the best qualified to attempt the change, it is environed with doubts which can only be dispelled by the light of experiment. In the United States these doubts are greatly increased by the complex form of the government. In the division of power, between the federal and State governments, the line of separation is not sufficiently distinct to prevent collisions, which may disturb the harmony of the system. Collisions have already arisen, and, in the course of human events, may be reasonably expected to arise, until the line of separation by which their relative powers and duties are determined, shall be distinctly defined by practice, or by explanatory amendments of the constitution, effected according to the forms prescribed in that instrument. Upon no question will collision more likely arise than that contemplated by the resolution under which this report is submitted. No attempt to make the change has succeeded. The measure, when stripped of extraneous difficulties, must be admitted to be of doubtful tendency. Under the most auspicious circumstances it may prove abortive. Under circumstances in any degree adverse, it must inevitably fail. Any obstacle opposed to its execution, by one or more of the State governments, would be decisive of its fate. Their simple acquiescence in the measure would not be sufficient to secure to it that issue, to which the principles upon which it might be established, would necessarily lead. Their active co-operation would be indispensable. The banks which derive their authority from the State governments, are generally bound by their charters to discharge their notes in specie on demand. From this obligation it would be necessary to the system to relieve them. The obligation to discharge their notes upon demand, in the national currency, should be substituted for that of paying them in specie.

If these obstacles should be removed, that connected with the public debt, which has been suggested in a previous part of the report, would still remain. After the substitution of the national currency, gold and silver would be imported only in the quantity required for manufactures, and for the prosecution of those branches of trade in which

they are primary articles of commerce. For these purposes, the importations would be sufficient. They might even be sufficient, and at a reasonable price, for the payment of the annual interest of the public debt. But, after the year 1824, when the sum of $10,000,000 would annually be expended by the Commissioners of the Sinking Fund, it is probable that the premium which would be paid upon it, would be considerable, until the debt was extinguished. A compromise, as has already been suggested, with the public creditors, would seem to be a measure preliminary to any attempt to establish a paper currency. It is more than probable that the attempt would not only be unsuccessful, but that it would injuriously affect the public credit.

It may also be proper to observe, that those sections of the Union where a measure of this kind would be most likely to be acceptable, would probably derive from it the least benefit. In the West and in the South, the complaints of a deficient currency have been most distinctly heard. In the latter, these complaints are of recent date. In both they proceed in a greater degree from the disbursement of the public revenue than from any other cause. The great mass of public expenditure is made to the East of this city. The revenue accruing from imports, though principally collected in the middle and eastern States, is paid by the great mass of consumers throughout the United States. That which is paid for the public lands, although in some degree drawn from every part of the Union, is principally paid by the citizens of the West, and of the South. The greatest part of the revenue accruing from the public lands, as well as that collected in the southern States, upon imports, has been transferred to the middle and eastern States to be expended. The necessity of making this transfer, arises from the circumstance that the great mass of the public debt is held in those States, or by foreigners, whose agents reside in them; and from the establishment of dock-yards and naval stations in their principal ports. This transfer will continue to be necessary until the public debt shall be extinguished, and until the other expenditures of the government can, consistently with the public interest, be more equally distributed. If a national currency should be established, the demand for it in the southern and western States, for the purpose of transmission, would be incessant; whilst its return, by the ordinary course of trade, especially in the latter, would be slow, and in some degree uncertain. The currency, being everywhere receivable by the government, would, for the purpose of remittance, be more frequently demanded in that section than specie; for the same reason, that the notes of the Bank of the United States and its offices command there, at this time, a premium in specie. As the transfers of the public money are made by the Bank of the United States, the excitement produced by the demand for specie or funds that can be remitted consequent upon such transfers, has been directed against that institution. All the evils which the community in particular parts of the country has suffered from the sudden decrease of the currency, as well as from its depreciation, have

been ascribed to the Bank of the United States, which, in transferring the public funds, has been a passive agent in the hands of the government.

It is then believed that the evils which are felt in those sections of the Union where the distress is most general, will not be extensively relieved by the establishment of a national currency. The sufferings which have been produced by the efforts that have been made to resume, and to continue, specie payments, have been great. They are not terminated, and must continue until the value of property, and the price of labor, shall assume that relation to the precious metals which our wealth and industry, compared with those of other States, shall enable us to retain. Until this shall be effected, an abortive attempt, by the substitution of a paper currency, to arrest the evils we are suffering, will produce the most distressing consequences. The sufferings that are past will, in such an event, recur with additional violence, and the nation will again find itself in the situation which it held at the moment when specie payments were resumed.

I have the honor to be your most obedient servant,

WM. H. CRAWFORD.

The Honorable the SPEAKER
of the House of Representatives.

A.

GENERAL STATEMENT of the Bank of the United States, and its Offices of Discount and Deposit, at the dates specified herein.

DR.

DATE.		Funded debt of the U. S., including that pledged by the Charleston Banks.	Bills discounted on personal security.	Bills discounted on funded debt.	Bills discounted on bank stock, &c.	Foreign bills of Exchange.	Domestic bills of Exchange.	Baring, Brothers, & Co., on account of bills in favor of J. Richards.
1819.								
Septem'r 27	Bank United States	7,252,501 34	2,002,001 11	65,000	4,532,676 24	138,470 66	23,554 37	94,864 37
20	Office Portsmouth		192,163 15	150	3,978 00		500 00	
23	Boston		272,546 14	5,610	11,800 00			
23	Providence		316,698 25		120 00		58,069 29	
27	Middletown		217,366 48	300	23,585 00		1,300 00	
29	New York		1,393,215 32	61,479				
27	Baltimore		3,591,410 39	91,000	[1] 2,141,684 29		29,883 43	
25	Washington		1,005,969 97	3,785	142,669 00			
22	Richmond		1,742,455 08		81,100 00			
20	Norfolk		726,705 91		95,394 00			
22	Fayetteville		562,001 26		49,210 00		14,450 00	
14	Charleston		1,806,732 23	1,700	723,888 30		5,000 00	
14	Savannah		1,325,239 93		59,235 00		277,174 10	
10	Lexington		1,210,755 46		32,216 00		109,438 37	
7	Louisville		634,979 65				435,919 00	
11	Chillicothe		458,994 78				17,100 00	
11	Cincinnati		1,501,328 88				300,421 30	
1	New Orleans		1,575,903 52		38,960 00		63,873 00	
23	Pittsburgh		689,661 05				38,405 00	
		7,252,501 34	21,226,128 56	229,024	7,937,515 83	138,470 66	1,375,087 86	94,864 37

STATEMENT A.—Continued.

DR.

Date.		Due from offices of Discount and Deposit.	Due from State Banks.	Real Estate, permanent expenses, and bonus.	Expenses.	Cash deficiency.	Notes of the Bank U. S. and branches.	Notes of State Banks.	Specie.
1819.									
Septem'r 27	Bank United States	30,337,369 22	882,046 41	569,937 82	21,627 78		5,633,857 09	214,771 14	1,197,941 52
20	Office Portsmouth	90,552 29			801 24		161,555 00	25,059 40	9,723 05
23	Boston	31,046 71	305,775 47		3,021 56		384,315 00	21,333 00	79,936 82
23	Providence	18,900 81	10,116 00		2,706 19		225,295 00	25,246 90	30,085 03
27	Middletown	70,399 52	5,277 46		1,265 81		158,595 00	22,237 00	73,641 38
29	New York	203,624 67	224,225 70		6,550 53		618,530 00	58,324 84	313,611 04
27	Baltimore	155,889 81	222,950 74	72,433 37	5,484 43	146,454 74	236,120 00	53,482 49	278,498 15
25	Washington	291,724 42	14,208 36	16,605 29	787 05		428,500 00	5,390 28	22,270 01
22	Richmond	252,244 00	3,152 45	33,692 32	3,812 09		375,200 00	46,090 61	110,320 31
20	Norfolk	227,691 03	46,564 86	23,205 81	3,414 09		27,280 00	23,476 82	79,479 43
22	Fayetteville	6,860 80	105,022 51		3,093 59		3,540 00	43,622 00	87,760 03
14	Charleston	110,827 58	47,000 00	50,994 85	6,036 77		213,610 00	230,173 00	261,253 57
14	Savannah	99,601 56	84,784 70		4,758 45		421,110 00	156,777 00	84,629 42
10	Lexington	92,992 41	96,285 90		3,165 99		80,780 00	22,480 00	70,035 63
7	Louisville	154,814 48	12,346 85		2,485 38		129,650 00	54,596 38	104,306 52
11	Chillicothe	32,896 80	47,126 99		2,321 99		374,550 00	14,115 00	28,870 03
11	Cincinnati	54,892 12	658,093 64		2,897 29		211,640 00	29,641 00	91,485 81
1	New Orleans	24,715 53	174,882 61		2,831 16		535,370 00	86,002 00	320,389 63
23	Pittsburgh	10,668 33	25,030 00	14,123 13	2,875 22		362,650 00	1,105 00	10,242 53
		32,267,712 09	2,964,860 65	780,992 59	79,936 61	146,454 74	10,582,147 09	1,133,923 86	3,254,479 91

STATEMENT A.—Continued.

CR.

Date.		Capital Stock.	Bank, Branch, and Post Notes.	Dividends unclaimed.	Discounts exchanged and Interest.	Profit and Loss.	Due to the Bank U. S., and Offices of Discount and Deposit.	Due to State Banks.
1819.								
Septem'r 27	Bank United States	34,973,828 63	14,392,258 49	19,645 80	49,474 01	1,104,932 94		106,951 84
20	Office Portsmouth				3,732 42		435,312 57	
23	Boston			345 50	5,031 71		705,741 61	156,954 94
23	Providence				7,955 76		633,044 64	11,925 00
27	Middletown				4,846 90		547,985 32	7,643 77
29	New York			602 50	29,994 00		1,978,578 66	151,112 66
27	Baltimore			4,565 30	53,436 37		6,608,809 08	23,405 85
25	Washington			1,194 50	18,539 47		1,630,839 82	50,657 73
22	Richmond			1,526 50	32,336 02		2,312,430 70	24,482 97
20	Norfolk			126 00	11,458 43		1,138,740 51	
22	Fayetteville			585 00	13,752 45		819,633 96	7,767 30
14	Charleston			4,650 20	47,473 85		2,777,733 82	29,220 74
14	Savannah			325 00	31,571 06		2,330,152 01	10,872 00
10	Lexington				36,838 23		1,613,097 08	
7	Louisville			248 30	15,020 94		1,404,773 65	81,703 40
11	Chillicothe				8,134 88		957,443 62	1,267 57
11	Cincinnati				53,214 73		2,766,441 55	1,000 00
1	New Orleans				30,427 73		2,319,445 27	10,852 53
23	Pittsburgh				11,849 32		1,120,931 37	
		34,973,828 63	14,392,258 49	33,814 60	465,088 28	1,104,932 94	32,101,135 24	675,818 30

STATEMENT A.—Continued.

CR.

Date.		Due to Baring, Brothers, & Co., and Thomas Wilson, & Co.	Premium and damages on bills purchas'd on account of Baring, Brothers, & Co.	Bills of Exchange rec'd of S. Smith and B.	Deposits on account of the Treasurer of the U. States.	Deposits on account of Public Offices.	Deposits on account of individuals.
1819.							
Septem'r 27	Bank United States	142,040 03	43,410 20	37,355 55	1,253,003 95	271,592 04	572,125 59
20	Office Portsmouth					39,030 34	6,406 80
23	Boston					164,511 55	82,799 39
23	Providence					17,081 95	17,230 12
27	Middletown					9,669 15	3,822 51
29	New York					355,580 04	363,693 24
27	Baltimore					191,444 63	143,630 61
25	Washington					282,127 86	105,390 62
32	Richmond					81,901 04	195,389 63
20	Norfolk						102,887 01
22	Fayetteville					21,224 24	12,597 24
14	Charleston					67,614 27	530,523 42
14	Savannah					43,776 80	96,613 29
10	Lexington					24,295 50	43,918 95
7	Louisville						27,351 97
11	Chillicothe						9,129 52
11	Cincinnati						29,748 76
1	New Orleans					191,651 01	270,550 91
23	Pittsburgh					4,300 39	17,649 18
		142,040 03	43,410 20	37,355 55	1,253,003 95	1,765,800 81	2,631,453 76
		Deduct amount overdrawn at Washington....			155,840 62		
					1,097,163 33		

STATEMENT A.—Continued.

The total amount of Bank and Branch Bank Notes issued, is			$14,392,258 49
Of which there are on hand at the Bank and Branches		$10,582,147 09	
In circulation as follows:			
Notes of the Bank of the United States	$864,716 00		
Do Offices Portsmouth	103,530 00		
Do do Boston	254,400 00		
Do do Providence	38,295 00		
Do do Middletown	64,195 00		
Do do New York	448,020 00		
Do do Baltimore	331,620 00		
Do do Washington	494,175 00		
Do do Richmond	155,580 00		
Do do Norfolk	69,390 00		
Do do Fayetteville	93,130 00		
Do do Charleston	190,890 00		
Do do Savannah	182,820 00		
Do do Lexington	73,240 00		
Do do Louisville	117,680 00		
Do do Chillicothe	15,960 00		
Do do Cincinnati	105,030 00		
Do do New Orleans	174,760 00		
Do do Pittsburgh	32,680 00		
		3,810,111 40	
			14,392,258 49

RECAPITULATION.

Dr.			Cr.		
Funded debt of the U. States (various)		$7,252,501 34	Capital stock		$34,973,828 63
Bills discounted, viz:			Bank, branch, and post, notes		14,392,258 49
On personal security	21,226,128 56		Dividends unclaimed		33,814 60
On ditto and funded debt	229,024 00		Discount, exchange, and interest		465,088 28
On ditto and bank stock, &c	7,937,515 83		Profit and loss		1,104,932 94
		29,392,668 39	Due the Bank of the United States and offices of discount and deposit		32,101,135 24
Bills of Exchange, viz:			Due State banks		675,818 30
Foreign	138,470 66		Due Baring, Brothers & Co and Thomas Wilson & Co.		142,040 03
Domestic	1,375,087 86		Premium and damages on bills purchased on account of Baring, Brothers, & Co		43,410 20
		1,513,558 52	Bills of exchange, received of S. Smith and Buchanan		37,355 55
Baring, Brothers & Co., for bills in favor of J. Richards		94,864 37	Deposits, viz:		
Offices of discount and deposit		32,267,712 09	On account of the Treasurer of the United States	1,097,163 38	
State banks		2,964,860 65	On account of public offices	1,765,800 81	
Real estate, permanent expenses, and bonus		780,992 59	On account of individuals	2,631,453 76	
Expenses		79,936 61			5,494,417 90
Cash, viz:					
Deficient at Baltimore	146,454 74				
Notes of the Bank of the United States, and branches	10,582,147 09				
Notes of State Banks	1,133,923 86				
Specie	3,254,479 91				
		15,117,005 60			
Total		89,464,100 16			89,464,100 16

Bank of the United States, *October* 1, 1819.

JONATHAN SMITH, *Cashier.*

B.

STATEMENT of the Bank Capital in the several States, Districts, and Territories of the United States, as far as it was known at the Treasury, during the years 1814, 1815, 1816, *and* 1817.

State, District, or Territory.	Capital. 1814.	Capital. 1815.	Capital. 1816.	Capital. 1817.
Maine	$1,380,000 00	$1,930,000 00	$1,860,000 00	$1,720,000 00
New Hampshire	838,250 00	942,350 00	943,350 00	997,550 00
Vermont				
Massachusetts	11,350,000 00	11,600,000 00	11,650,000 00	11,300,000 00
Rhode Island	2,317,320 00	2,317,320 00	2,317,320 00	2,317,320 00
Connecticut	3,655,750 00	4,063,675 00	3,909,575 00	4,021,262 00
New York	17,185,352 00	17,700,736 00	17,145,979 00	16,991,704 00
New Jersey	2,121,932 00	2,071,957 00	1,672,115 00	2,076,465 00
Pennsylvania	14,963,333 00	15,346,432 00	15,393,594 00	15,732,615 00
Delaware	996,990 00	973,890 00	974,500 00	974,500 00
Maryland	7,872,002 00	8,243,422 00	8,346,782 00	8,657,147 00
District of Columbia	4,060,814 00	4,244,765 00	4,650,176 00	5,008,527 00
Virginia	3,592,000 00	4,752,460 00	5,521,415 00	4,884,565 00
North Carolina	1,576,600 00	2,594,600 00	2,776,000 00	2,796,600 00
South Carolina	3,730,900 00	3,832,758 00	3,832,758 00	3,919,973 00
Georgia	623,580 00	1,239,440 00	1,502,600 00	1,502,600 00
Louisiana	1,432,300 00	1,402,300 00	1,422,300 00	1,432,300 00
Mississippi	100,000 00	100,000 00	100,000 00	200,000 00
Tennessee	212,962 00	365,610 00	498,506 00	995,500 00
Kentucky	932,600 00	2,532,000 00	2,057,000 00	2,823,100 00
Ohio	1,435,819 00	1,932,108 00	2,806,737 00	2,003,969 00
Indiana				127,624 00
Missouri				193,125 00
	80,378,504 00	88,185,823 00	89,380,707 00	90,676,446 00
Bank of the U. States				35,000,000 00
				$125,676,446 00

C.—*A STATEMENT showing the condition of the Banks in the several States, Districts, and Territories of the United States, as far as the same was known at the Treasury Department, in the year* 1819.

State, District, or Territory.	DEBTS OF THE BANKS.					
	Capital paid in.	Notes in circulation.	Deposits.		Due to other Banks.	Undivided profits.
			Public.	Private.		
Maine	1,536,666 66	1,336,783 00	34,609 86	253,582 27	.....	39,629 87
Massachusetts	10,475,116 68	2,474,107 00	106,341 29	2,510,194 44	4,860 55	319,134 16
New Hampshire	1,005,276 00	589,114 00	.....	117,441 26	.....	68,789 85
Vermont	44,955 00	185,342 00	.....	46,121 77	.....	581 18
Rhode Island	2,982,026 12	738,192 97	38,857 81	464,654 08	953 44	100,059 81
Connecticut	467,937 50	138,234 00	22,348 49	53,431 40	1,748 00	9,116 24
New Jersey	214,740 00	110,624 00	25,417 00	127,186 00	15,772 00	24,784 00
Pennsylvania	8,595,788 59	3,919,894 80	37,322 84	2,880,928 33	1,009,565 53	279,192 39
Delaware	974,900 75	405,972 62	.....	211,454 37	177,237 75	145,326 78
Maryland	86,290 00	44,435 50	.....	27,153 41	1,727 91	2,763 76
Columbia	5,525,319 00	838,030 36	980,510 08	464,393 30	765,510 32	302,460 99
Virginia	5,212,192 50	2,733,745 88	37,396 47	844,659 20	88,931 96	72,780 80
North Carolina	2,964,887 00	3,851,919 00	.....	635,761 00	142,568 00	315,476 00
South Carolina	1,800,000 00	788,200 00	.....	377,163 00	6,047 50	278,102 78
Georgia	600,000 00	705,203 50	1,165 18	202,481 76	109,215 54	51,801 95
Alabama	321,112 50	166,686 62	888,138 79	70,243 92	.....	23,653 54
Tennessee	1,545,867 50	898,129 00	17,003 71	262,866 22	29,884 00	82,253 25
Kentucky	4,307,431 56	1,403,404 71	.....	1,035,653 18	1,752 25	205,117 47
Ohio	1,697,463 21	1,203,869 46	191,454 22	262,999 88	578,891 91	88,283 28
Indiana	202,857 07	276,288 50	191,484 95	25,264 68	104,737 23	9,586 11
Illinois	140,910 00	52,021 00	119,036 92	32,568 60	.....	2,994 49
Missouri	250,000 00	135,258 50	700,679 05	72,973 00	.....	10,207 33
Mississippi	900,000 00	275,447 00	.....	212,980 01	.....	37,740 43
	51,851,737 64	23,270,903 42	3,391,766 66	11,192,155 08	3,039,403 89	2,469,836 46
New York	20,488,933 00	12,500,000 00	Not stated.	Not stated.	Not stated.	Not stated.
	72,340,770 64	35,770,903 42				

STATEMENT C.—Continued.

State, District, or Territory.	RESOURCES OF THE BANKS. Loans or discounts.	Due by other banks, in notes or otherwise.	Specie.	United States' stocks.	Stocks of incorporated companies, bills of exchange, & other miscellaneous effects	Real estate.	Remarks.
Maine	2,512,716 73	251,730 51	339,749 45	.....	6,294 38	90,780 59	United States' stock is not generally distinguished in the returns from Maine and Massachusetts; and not always in others.
Massachusetts	12,928,188 04	1,461,303 01	901,700 41	128,844 03	48,498 26	421,320 37	
New Hampshire	1,446,089 39	129,587 26	153,831 53	.....	.....	51,112 93	
Vermont	77,326 00	135,269 03	49,690 69	.....	14,714 23	.....	
Rhode Island	3,269,044 28	288,256 98	406,867 80	131,660 60	91,539 88	137,474 69	
Connecticut	496,453 23	52,688 70	44,645 70	.....	88,040 00	10,988 00	
New Jersey	291,405 00	53,780 00	21,413 00	109,600 00	40,125 00	2,200 00	
Pennsylvania	13,183,861 93	1,208,828 44	1,061,067 23	411,676 00	405,631 26	351,537 02	Notes of specie-paying banks are sometimes entered as specie, in the statements of the Pennsylvania banks.
Delaware	1,509,999 49	120,500 06	115,502 95	1,285 26	75,920 00	91,684 51	
Maryland	127,579 75	10,835 52	21,030 15	.....	.....	2,925 16	
Columbia	6,823,374 98	749,269 14	265,234 00	100,443 46	635,931 93	301,970 54	
Virginia	7,326,777 66	250,988 74	993,672 76	.....	87,302 01	330,965 64	
North Carolina	6,355,928 00	506,388 00	705,582 00	.....	152,093 00	190,620 00	
South Carolina	2,165,639 73	63,832 96	245,487 98	622,811 17	75,399 87	76,341 57	
Georgia	1,175,397 32	136,325 00	346,445 61	.....	.....	11,700 00	
Alabama	858,729 05	353,033 93	192,708 46	.....	60,688 93	4,675 00	
Tennessee	2,214,729 56	218,060 73	343,884 41	.....	18,905 40	40,423 58	
Kentucky	5,859,262 30	243,737 08	693,381 19	.....	150,610 98	6,367 62	
Ohio	2,779,314 63	422,269 60	433,512 04	.....	294,765 99	92,999 70	
Indiana	300,278 91	395,932 70	86,350 83	.....	25,000 00	2,656 10	
Illinois	206,694 32	59,332 18	74,715 51	.....	6,614 00	175 00	
Missouri	456,946 00	447,941 00	252,563 50	.....	.....	11,667 38	
Mississippi	1,257,859 46	56,361 97	79,608 01	.....	.....	32,338 00	
	73,623,595 76	7,616,252 54	7,828,745 21	1,506,320 52	2,278,075 12	2,262,923 40	
New York	Not stated.	Not stated.	2,000,000 00	Not stated.	Not stated.	Not stated.	This is stated on the authority of a report made by a committee of the New York Legislature, at its last session.
			9,828,745 21				

Later returns from the banks in Maine and Massachusetts, and several of the banks in Pennsylvania, show the following results:

Maine	capital increased about	1-13	circulation increased about	1-30	specie increased at	8-10	discounts decreased about	1-52.
Massachusetts	ditto	1-10	decreased	1-19	ditto	5-10	increased	1-25.
Pennsylvania	ditto	1-64	decreased	4-10	ditto	1-13	decreased	1-6.

D.

A STATEMENT showing the aggregate amount of the capital, circulation, specie, and discounts, of several banks, (sixteen in number), situated in Maine, Massachusetts, Rhode Island, Pennsylvania, District of Columbia, Virginia, South Carolina, Georgia, and Ohio, on the 30th of September, annually, in 1813, 1815, *and* 1819.

YEAR.	CAPITAL.	CIRCULATION.	SPECIE.	DISCOUNTS.
1813	$6,903,377	$6,845,344	$3,059,149	$12,990,975
1815	8,852,371	9,944,757	1,693,918	15,727,218
1819	9,711,960	4,259,334	1,726,465	12,959,560

E.

A STATEMENT showing the rate of exchange between Boston, New York, Philadelphia, and Baltimore, and London, during the years 1813, 1814, 1815, *and* 1816; *and, also, the price of specie at New York, and the rate of exchange between that place, Boston, Philadelphia, and Baltimore, during the same period.*

PERIODS.	AT NEW YORK.					AT BOSTON.	AT PHILADELPHIA.	AT BALTIMORE.	REMARKS.
	Specie.	Bills on Boston.	Bills on Philadel'a.	Bills on Baltimore.	Bills on London.	Bills on London.	Bills on London.	Bills on London.	
	per cent.	*per cent.*	*per cent.*	*per cent.*	*per cent.*	*per cent.*	*per cent.*	*per cent.*	
1813. January		*a* ½			*d* 18	*d* 18	*d* 17½ to 19	*d* 17	
February						*d* 17	*d* 18 to 20	*d* 17	
March						*d* 16½	*d* 18 to 15	*d* 16	
April		*a* ½			*d* 15	*d* 16	*d* 14 to 15	*d* 15	
May						*d* 16	*d* 16 to 17	*d* 16	
June						*d* 15	*d* 16 to 17	*d* 17	
July		*a* ½			*d* 15	*d* 15	*d* 15 to 17½	*d* 15	
August						*d* 14½	*d* 16½ to 15		
September						*d* 14½	*d* 14½ to 16		
October		*a* ½			*d* 14	*d* 14½	*d* 15 to 12½	*d* 14 to 15	
November						*d* 13	*d* 12½ to 13	*d* 10 to 12½	Bills on London fluctuated very much in price towards the close of December, at Boston and Philadelphia.
December						*d* 7	*d* 13 to 5	*d* 10 to 12½	
1814. January		*a* 1			*d* 8	*d* 5	*d* 5 to 2		
February						*d* 8	*d* 6½ to 9	*d* 5	
March						*d* 10	*d* 7 to 10	*d* 8	
April		*a* 1½			*d* 7½	*d* 8	*d* 5 to 8½	*d* 5	
May						*d* 10	*d* 8 to 10		
June						*d* 12	*d* 9 to 12		
July			*d* 5		*d* 11	*d* 12½	*d* 9 to 12	*d* 10 to 7½	
August						*d* 12	*d* 12 to 13	*d* 11 to 7	Specie payments suspended at N. York, and south of that place, 1st of September.
September						*d* 12	*d* 14 to 7½	*d* 11 to 7	
October	*a* 10 to 11				*d* 5 to 6	*d* 13½	*d* 10 to 2½	*d* 3 to par.	
November						*d* 12½	*d* 2½ to 2½ *a*	par to 2½ *a*	Bills on London fluctuated very much during these three months, at Boston and Philadelphia.
December						*d* 16	par to 2½ *a*	2½ to 3 *a*	
1815. January	*a* 11	*a* 23	*d* 2		par to 1 *a*	*d* 14	1 to 3 *a*	4 to par.	
February						*d* 14	3 to 2 *d*	par.	News of peace 13th of this month, when the price of London bills declined.
March						*d* 8	2 to 2¾ *d*	par to 2 *d*	
April	*a* 12		*d* 3	*d* 6	*d* 4	*d* 8	2½ to par.	par to 3½ *a*	
May						*d* 5½	par to 6 *a*	2 to 7½ *a*	
June						*d* 9	4 to 7 *a*	7 to 8 *a*	
July	*a* 13½ to 15	*a* 10 to 11	*d* 4½	*d* 6	par	*d* 4½	5½ to 6½ *a*	8 to 5 *a*	
August						*d* 9	6½ to 10 *a*	8 to 16 *a*	
September						*d* 3	11 to 7½ *a*	11½ to 19 *a*	
October	*a* 14 to 15	*a* 13½ to 15	*d* 5	*d* 7	*a* 11	*d* 2½	16½ to 18 *a*	18 to 20 *a*	

E.—*A STATEMENT showing the rate of exchange between Boston, New York, Philadelphia, and Baltimore, and London, &c.*—Continued.

PERIODS.	AT NEW YORK.					AT BOSTON.	AT PHILADELPHIA.	AT BALTIMORE.	REMARKS.
	Specie.	Bills on Boston.	Bills on Philadel'a.	Bills on Baltimore.	Bills on London.	Bills on London.	Bills on London.	Bills on London.	
	per cent.	*per cent.*	*per cent.*	*per cent.*	*per cent.*	*per cent.*	*per cent.*	*per cent.*	
November..	.....	.....	.....	.....	.....	*d* 3½	14 to 9 *a*	18 to 11 *a*	
December..	.....	.....	.....	.....	.....	*d* 2½	10 to 12½ *a*	14 to 16 *a*	
1816. January....	*a* 29	*a* 8⅓	*d* 4½	*d* 8	*a* 7 to 7½	*d* 1½	10 to 12½ *a*	14 to 15 *a*	
February...	.....	.....	.....	.....	.....	par.	12 to 13 *a*	15 to 16 *a*	
March	.....	.....	.....	.....	.....	*a* 3	12½ to 16 *a*	16 to 20 *a*	
April.....	*a* 12	*a* 6 to 6½	*d* 5½	*d* 10	*a* 9 to 9½	*a* 3½	14 to 16 *a*	18 to 20 *a*	
May.....	.....	.....	.....	.....	.....	par.	16 to 20 *a*	18 to 20 *a*	
June.....	.....	.....	.....	.....	.....	*d* 1½	17½ to 20 *a*	20 to 22 *a*	
July.....	*a* 6	*a* 6	*d* 10½ to 10½	*d* 14	*a* 3½	par.	18 to 10 *a*	20 to 17 *a*	
August.....	.....	.....	.....	.....	.....	*a* 1½	10 to 16½ *a*	17 to 14 *a*	
September..	.....	.....	.....	.....	.....	*a* 3	14 to 15 *a*	16 to 18 *a*	
October.....	*a* 2½ to 3	*a* ½ to 1	*d* 4½ to 5	*d* 7½	*a* 6	*a* 4½	12 to 15 *a*	17 to 15 *a*	
November..	.....	.....	.....	.....	.....	*a* 4½	14 to 16½ *a*	15 to 9 *a*	
December..	.....	.....	.....	.....	.....	*a* 2	5½ to 7 *a*	9 to 10 *a*	

NOTE.—The rate of premium is designated by the letter *a*, and the rate of discount by the letter *d*.

REPORT OF THE COMMITTEE ON THE CURRENCY, ON THE EXPEDIENCY OF INCREASING THE RELATIVE VALUE OF THE GOLD HEREAFTER TO BE COINED AT THE MINT OF THE UNITED STATES.

FEBRUARY 2, 1821.—Read, and committed to a committee of the whole House.

The Committee, who were directed to inquire into the expediency of increasing the relative value of Gold, hereafter to be coined at the mint, have attended to that subject, and beg leave respectfully to report:

That they are of opinion the value of American Gold, compared with silver, ought to be somewhat higher than by law at present established.

On inquiry, they find that Gold coins, both foreign and of the United States, have, in a great measure, disappeared; and, from the best calculation that can be made, there is reason to apprehend they will be wholly banished from circulation, and it ought not to be a matter of surprise, under our present regulations, that this should be the case.

There remains no longer any doubt that the Gold coins of the United States are, by our laws, rated at a value lower than in almost any other Country, in comparison with that of silver; this occasions the Gold to be constantly selected, when it can be obtained, in preference to silver, whenever required for remittance from this to foreign countries; and, at the same time, prevents those who have occasion to remit to the United States from doing it in Gold.

Hence, there is a continual and steady drain of that metal from this Country, without any correspondent return, which must continue while there remains any of it among us.

The importations of it will be confined to small quantities, and from Countries from which nothing better can be obtained.

There have been coined, at the mint of the United States, nearly six millions of dollars in Gold.

It is doubtful whether any considerable portion of it can, at this time, be found within the United States.

It is ascertained, in one of our principal commercial cities, quite in the vicinity of the mint, that the Gold coin, in an office of discount and

deposit ot the Bank of the United States, there located, in November, 1819, amounted to $165,000, and the silver coin to $118,000. That, since that time, the silver coin has increased to $700,000, while the Gold coin has diminished to the sum of $1,200, one hundred only of which is American. And it is stated, that the vaults of the State banks, in the same city, having a Capital, in the aggregate, as is believed, of nearly eight millions, exhibit a similar result. It is scarcely to be doubted, that on examination in the other commercial cities similar additional proof would be furnished.

It now becomes a question of serious import, to be decided by this nation, whether a Gold currency be at all desirable, or whether it should wholly give place to silver. By some a silver currency is deemed the most eligible; they contend, that our circulating metallic currency should be ponderous, and inconvenient of transmission, that it would, in such case, remain in the country and stationary.

On the other hand it is believed, by your committee, that a more portable currency may be, on many accounts, and, in many instances, must be, much more convenient, and in some cases absolutely necessary.

It can not be denied, that the lighter and smaller the currency, in proportion to its value, the greater will be the accommodation in the negotiations between the great extremes of the Union.

In proportion to this facility the price of exchange will be lessened; commercial transactions would, thus, be carried on at an enhanced profit to all concerned. Moreover, in time of war, it will never fail to become requisite to make use of specie in payments and remittances; and these will be demanded, almost exclusively, at the extreme borders and frontiers of the Union.

In such case Gold furnishes a medium, which will not be light and convenient, but which can be transmitted with secrecy, thereby avoiding the risks incident to war and commotion.

Those who carry their recollections back to the incidents of the late war cannot fail of being forcibly impressed with this idea.

Our empire is widely extended and becoming more so; and, at the same time, sparsely settled. The transmission of large sums, especially in time of war, if in ponderous silver, must be extremely inconvenient, and often times attended with great danger. It would seem, therefore, that, as currency, the Gold Coin has, in this country, manifest advantages over that of silver.

But, there is another particular not unworthy of consideration.

We have before stated, that the Gold Coins are worth, in foreign countries, more, in comparison with Silver, than in our own. The average of this increased value is believed to exceed six-tenths of a dollar in every fifteen dollars.

In Spain and Portugal three half eagles are worth sixteen dollars; in Cuba, seventeen; in the West Indies, generally, sixteen; in England,

fifteen and one-fifth; in Holland, fifteen; and in France, fifteen and a half.

These calculations may not be precisely, as stated, but are believed to be nearly accurate.

In the United States, before the establishment of the present government, it has heretofore been ascertained by a committee of Congress, that, by custom, the value of Gold, had been considered as equivalent to about fifteen and six-tenths of its weight in Silver. * This, without doubt, arose from finding this to be the average of the different values affixed to the Gold in different foreign countries.

Why it was thought proper, on establishing the mint of the United States, to reduce this value to fifteen for one, it not now material to inquire. It is sufficient to know from unhappy experience, that its tendency is to rid us of a gold currency and leave us nothing but silver.

The merchants if they have occasion to import specie and cannot obtain silver, are compelled to import Gold, at a loss of from two to ten per cent. If they have a remittance to make, they will, if possible, exchange silver for Gold, as, thereby, they will gain from two to ten per cent., according to the value of Gold in the country to which the remittance is to be made.

An occurrence strikingly illustrative upon this point, is stated in an elaborate report of a former committee, on the subject of the currency, to which your committee would beg leave to refer, as affording much useful information on this subject generally.

The Bank of the United States entered into a contract with Messrs. Baring & Co. of London, for the supply of two millions of dollars in specie, in equal parts, as near as might be practicable, of Gold and silver, at the American standard. The amount was accordingly furnished; but not a dollar of it in Gold; although Gold is a currency of Great Britain, and silver is admissible there, as a tender, in but very small sums.

It will, of course, be objected, that, if we should now render Gold four per cent. better, we shall, thereby, put into the hands of its present holders, a clear nett gain to that amount, provided they hold it with an intent to use it in this country.

But it is not perceived how this will injure the public or individuals. And it will not be regretted by the benevolent, that individuals should be benefited, if no one be injured.

If, however, individual wealth be a public blessing, all will be benefited. At any rate, this is an incident utterly unavoidable, to a certain extent, in this case.

It must be submitted to; as, otherwise, a positive national evil, of great magnitude, as your committee deem it, must be encountered.

It will, moreover, be objected, that speculators will take advantage of the unwary, and, ere they will have been apprized of the increased value of their Gold, will have purchased it of them at the former rate.

* See page 441.

This, however, your committee believe, will, in a great measure, be counteracted by a provision in the bill, accompanying this report, that the coin, at its increased value, shall not be a legal tender, until the first of July next. In this way, those who would buy it with a view to speculation would sustain a loss of interest amounting to nearly or quite as much as would otherwise be gained by the purchase.

If it be expedient to adopt the measure in contemplation, the present is the moment when it can and ought to be done. The longer we continue under the present regulation the worse will be our condition and the greater the injury we shall have sustained.

Your committee, therefore, in conformity to the foregoing sentiments, ask leave to report a bill.

[21st Congress, 1st Session, 135.]

REPORT FROM THE SECRETARY OF THE TREASURY, (IN COMPLIANCE WITH A RESOLUTION OF THE SENATE, OF THE 20TH DECEMBER, 1828,) RESPECTING THE RELATIVE VALUE OF GOLD AND SILVER, &c.

MAY 4, 1830.—Read, and ordered to be printed, and that 1000 additional copies be sent to the Senate.

TREASURY DEPARTMENT, *May* 4, 1830.

In obedience to a resolution of the Senate, of the 29th of December, 1828, "requiring the Secretary of the Treasury to ascertain, with as much accuracy as possible, the proportional values of gold and silver, in relation to each other; and to state such alterations in the gold coins of the United States as may be necessary to conform those coins to the silver coins, in their true relative value, and to report at their next session;" the Secretary of the Treasury has the honor to submit the following report:

Whatever causes affect the relative values of gold and silver, must have first affected the absolute or intrinsic value of one or both of them; and hence every inquiry as to the former necessarily involves the latter: the quantity of labor applied, under all the variety of circumstances of soil, climate, &c., which enter into the production of any given article, constitutes one principal measure of its value. But labor alone cannot determine the value of a product: that which is not suited either to the real or imaginary wants of man, can have no value in his estimation, whatever may have been the amount of labor required for its production. Hence another measure of value is to be sought, in the adaptation of the product to these wants. The aggregate of causes which control the value of these measures, respectively, is comprehended in the terms *supply* and *demand*, which alone regulate and establish the intrinsic as well as relative values of all exchangeable articles. Those of gold and silver are governed by the same general laws which determine the values of other products: but public necessity having re-

quired the establishment of some standard measure, in which contracts may be made, and exchanges regulated, between communities, the precious metals have, by general consent, been adopted as the most fit material for this purpose. This application of these metals, where two or more are used as standard measures of property, gives them a quality which does not necessarily belong to articles of commerce. It subjects their value to the influence of political regulations, whereby the demand may be increased or diminished for the one or the other, and their relative values changed, according to the interests or caprices of governments. But this effect is also controlled by the same general considerations which determine the value of all other articles entering into the purposes of human economy; viz: *supply* and *demand*, and the values thus ascertained are the result of the public judgment, made up by the combined intelligence of all those who best understand the real state of the market.

There are probably few measures which have engaged the attention of governments, from their origin, wherein those charged with the administration of public affairs have indicated more distrust of their judgment, or in which so many mistakes have been committed, as in that of adjusting and regulating the metallic standards of value, and their relation to each other. The Secretary of the Treasury therefore indulges no hope of being able to remove those difficulties, which inherently belong to the subject of the present inquiry.

The original adaptation of metals to measure of property was founded on weight and fineness alone. The use of coins computed by tale was of later invention; and the terms which express moneys of account were generally all derived from units of weights, and were originally synonimous with them. The Egyptian talent was a measure of weight, and also a money of account: the Roman pound, supposed to be derived from the Egyptian *minæ*, had the same properties; and so of many others. But the great convenience of computing measures of property by tale, together with a knowledge of the fact disclosed by experience, that coins could easily be kept in circulation by tale, although below the standard weight, have induced governments to rely upon this mode of computation, and frequently to debase their coins, as a means of raising money from the people without their knowledge. A few examples will suffice to show the progress of governments in this respect. Twenty shillings, weighing 3 *oz.* 12 *dwt.* 16 *grs.* will now pay an annuity in England, (allowing for a small difference between the Saxon and Troy pounds) contracted to be paid in the reign of William the Conqueror, in the equivalent of a pound weight of silver; being twenty shillings of the coinage of that day. In other countries, the debasement of coins is even more remarkable.

The German florin was originally a gold coin, worth about $2 28; it is now a silver coin, worth about 39½ cents. The French livre originally

contained a pound of silver, equal to 7,555 Troy grains; worth, according to the United States' standard, $18 16: it is now worth $18\frac{478}{1000}$ cents. The Spanish maravedi, in the year 1220, weighed eighty-four grains of gold, which, supposing it to be of the British or United States' standard, was worth $3 19; and the maravedi of the present day is about one-quarter of a cent.

The reigns of Henry the VIII. and Edward the VI. are the most distinguished in English history for reckless abuses in the debasement of the measures of property. Prior to the thirty-fourth year of the former reign, gold was estimated, at the mint, in comparison with silver, at $11\frac{151}{955}$ to 1. The subsequent abuses may be seen by referring to the different ratios established during this period.

By successive changes, the relative value of gold was reduced; and, in the 36th Henry VIII. it was estimated at $6\frac{2}{11}$ to 1.

37th Henry VIII.	do	5 to 1.
3d Edward VI.	do	$5\frac{5}{33}$ to 1.
4th Edward VI.	do	$4\frac{788}{955}$ to 1.
5th Edward VI.	do	$2\frac{394}{955}$ to 1.

These debasements were effected chiefly by increasing the proportion of alloy in silver coins, while their legal value at the Mint, and in payment of debts, was unchanged. They procured for the Crown the means of extensive plunder; but it is probable that no small portion went into the pockets of the numerous sharpers which such a policy must have produced.

These examples are not less discreditable to the morality of governments than to the intelligence of their people; for it cannot be supposed that so great frauds would have been attempted if their real character had been generally understood. The United States are, as yet, exempt from all such imputations in the regulation of their coins, as will be seen by referring to the acts of this Government in relation to its coinage; which may not be unprofitable in the present investigation.

On the 6th July, 1785, it was unanimously resolved by Congress, that the money unit of the United States should be one dollar;

That the smallest coin be of copper, of which 200 pass for one dollar; and

That the several pieces shall increase in a decimal ratio.

Neither the fineness nor weight of the unit was fixed, but no doubt the Spanish dollar was intended for the standard.

On the 8th of August, 1786, it was *Resolved*, That the standard of the United States of America for gold and silver shall be eleven parts fine and one part alloy.

That the money unit of the United States (viz: the dollar) shall contain of fine silver 375.64 grains. [This proposition originated with Mr. Jefferson in 1782—see his memoirs, 1st volume, page 43.]

That the money of account, to correspond with the division of coins, proceed in a decimal ratio as follows, viz:

Mills, the lowest money of account, of which one thousand shall be equal to the Federal dollar or money unit.....	0.0001
Cents, the highest copper piece, one hundred equal to a dollar.....	0.010
Dismes, the lowest silver coin, ten equal to a dollar.....	0.100
Dollars, the highest silver coin	1.000

That betwixt the dollar and the lowest copper coin, as fixed by the resolution of Congress of the 6th July, 1785, there shall be three silver coins and one copper coin.

That the silver coins shall be as follows.

One coin, containing 187.82 grains of fine silver, to be called half a dollar.

One coin, containing 75.125 grains of fine silver, to be called a double disme.

One coin, containing 37.564 grains of fine silver, to be called a disme.

That the two copper coins shall be as follows:

One, equal to the $\frac{1}{100}$ part of the Federal dollar, to be called a cent; and

One, equal to the $\frac{2}{100}$ part of the Federal dollar, to be called a half cent.

That two pounds and a quarter avoirdupois weight of copper shall constitute one hundred cents.

That there shall be two gold coins: one, containing two hundred and forty-six grains and two hundred and sixty-eight thousandth parts of a grain of fine gold, equal to ten dollars, to be stamped with the American eagle, and to be called an eagle.

One, containing 123.134 grains of fine gold, equal to five dollars, to be stamped in like manner, to be called a half eagle.

That the mint price of a pound, troy weight, of uncoined silver, $\frac{11}{12}$ fine, shall be [*] *nine dollars nine dimes and two cents.*

That the mint price of a pound, troy weight, of uncoined gold, $\frac{11}{12}$ fine, shall be 209.77 dollars.

On the 16th October, 1786, Congress adopted an ordinance for the establishment of the mint of the United States of America, and for regulating the value and alloy of coin.

By this ordinance it was made the duty of the assay-master to receive gold and silver bullion and foreign coin, to assay the same, and give his certificates for the value at the following rates:

For every pound, troy weight, of uncoined gold or foreign gold coin, $\frac{11}{12}$ fine, $209.77, money of the United States, as established by the resolution of 8th August, 1786.

[*This is an error which does not appear to have been noticed in any edition of the laws. The value of a pound weight of silver 11-12 fine, without allowance for coinage, at the rate of 375.64 grains of pure silver to the dollar, is $14.056, but no coins were made under this regulation.—H.]

For every pound, troy weight, of uncoined silver or foreign silver coin, $\frac{11}{12}$ fine, $\$13\frac{777}{1000}$ money of the United States, as aforesaid.

It was also made the duty of the Treasurer to receive and duly enter the certificates for uncoined gold and silver issued by the assay-master, and to pay ninety-five hundredths of the amount thereof in gold and silver, and five-hundredths in the copper coin of the United States.

From these proceedings it will be perceived that there was retained at the mint, on the coinage of gold, about $\frac{97}{1000}$, and on that of silver about $\frac{98}{1000}$, of one per cent.

The act of Congress of 2d April, 1792, establishing the mint and regulating the coins of the United States, fixes the weight of the eagle at 247½ grains of pure gold, or 270 grains of standard gold, equal to $\frac{11}{12}$th parts fine; and the weight of the dollar at 371¼ grains of pure, and 416 grains of standard, silver, equal to $\frac{1485}{1664}$ parts fine. It may be remarked, that, when the United States' dollar was established at $375\frac{64}{100}$ grains pure silver, and the eagle at $246\frac{268}{1000}$ grains of pure gold, the proportional value of gold to silver was 1 to 15.253. At that time the ounce of standard silver in England, $\frac{37}{40}$ fine, or 444 grains pure, was valued at the mint at 5*s.* 2*d.*, and the ounce of standard gold, $\frac{11}{12}$ fine, at 3*l.* 17*s.* 10½*d.*; hence the relative value of gold to silver was 1 to 15.209; nearly the same with that proposed by the resolution of 1786. But the weight of the United States' dollar was supposed to be greater than that of the latter coinage of Spanish dollars; and hence the reduction of it, by the act of 1792, to 371¼ grains; which, it appears from the report of the Secretary of the Treasury, was intended to be an average of the weight of the Spanish dollars then most current. The relative value of gold to silver, as fixed by the same act, was also founded on a supposed average of the relative values of those metals, as established amongst the principal commercial nations. But it does not appear for what reason the fineness of the silver was varied in that act from $\frac{11}{12}$ to $\frac{1485}{1664}$.

It is, however, not improbable that, in fixing the ratio of gold to silver as 1 to 15, the mint regulations of other countries were referred to, rather than the market prices; and, as silver has not been made a general tender, nor is it extensively coined, in England, the mint regulations of that country bear but a remote relation to the actual market value of silver, and were not to be relied upon as any guide in ascertaining the new ratio. Since the establishment of the ratio between gold and silver in the United States, various causes have contributed to lessen the comparative demand for silver. That which has the most direct influence upon it is the revolution in the India trade: some of the chief manufactures of that country are no longer consumed in the United States, and England pays for her whole consumption of India fabrics in fabrics of her own manufacture.

It was stated by Mr. Huskisson, in 1829, that, in the commerce with India, the difficulty was not as formerly, to find precious metals to remit in payment of the balance, but to find returns from India to Europe.

The change adopted in the monetary system of England in 1816, by which payments in silver were limited to forty shillings, has also diminished the comparative demand. These facts indicate causes for fluctuation in relative values, which, depending on the will of every independent government, as well as the operations of commercial enterprise, are beyond the reach of the political power of other governments to obviate or control.

It may be, therefore, safely asserted that there are no data to be found, even in the known causes which affect the value of gold and silver, from which a calculation of their values can be made with any claim to certainty. These can alone be discovered in the results which are produced by the operation of supply and demand. But these results are various at different periods in the same place, and in different places at the same period.

It may be proper here to observe, that the time employed in this inquiry has not been sufficient to collect the facts necessary to a full development of these results. A circular, sent to Europe, has obtained but little information. Nor is it, perhaps, to be expected that much could be procured on a subject so complex in its nature, and so little understood, except by a direct correspondence with those who had made it a peculiar study, and whose leisure and public spirit would authorize so heavy a demand on their attention. The requisite facts, so far as they are developed by the monetary transactions of the United States and those of France and England, are believed to be accurately ascertained. Several gentlemen, distinguished for intelligence and research, have, at considerable labor, rendered valuable information to the Department. Papers, communicated by Mr. Gallatin, Mr. John White, of Baltimore, Dr. Samuel Moore, director of the mint, and also a number of tabular statements in relation to exchanges, prices current of gold and silver, and calculations reducing the coins and moneys of account of other countries into the money of the United States, are appended.

England and France, by reason of their wealth and extensive commercial connexion, furnish the best data for ascertaining the ratio of gold to silver in Europe, if not throughout the world; and it is from these countries that the information most relied upon has been derived.

But, to avoid confounding the different ratios of these metals, their distinctive character should be noticed.

1st. The ratio fixed by regulation, or the value of gold coins compared with silver coins.

2d. The legal value of one metal compared with the market price of the other, or gold coins compared with silver bullion, or silver coin with gold bullion.

*3d. Gold bullion compared with silver bullion at the mint, when a charge for coinage is made.

4th. Gold bullion with silver bullion, in the market.

* Whenever this designation is referred to in this report, it is termed *mint price*, in distinction from the value of the coins, which is termed *mint value*.

In England, an ounce of pure gold is coined into £4 4*s.* $11\frac{5}{11}d.$; and, as there is no charge for coinage, the legal mint price is the same with the value of the metal when coined. An ounce of pure silver is coined into 5*s.* 11.35135*d.*; and as 5*s.* 11.35135*d.* : £4 4*s.* $11\frac{5}{11}d.$: : || 1 : 14.2878, the ratio of pure gold to pure silver in English coin. But the price given for pure silver at the mint is $67\frac{1}{37}$ pence per ounce; and as $67\frac{1}{37}d.$: £4 4*s.* $11\frac{5}{11}d.$: : 1 : 15.209, the ratio of gold to silver at the mint before coinage, or of silver bullion to gold coins. As the mint price of gold is the same with that of the gold coins, this difference arises from the charge for coining silver, the ounce of standard silver being received at the mint at 62*s.* and coined into 66*s.* But the market price of silver, owing to the limited demand for coinage, is considerably below that of the mint; it may be averaged, for the last five years, at $64\frac{43}{100}$ per oz. (pure;) and as 64.43*d.* : £4 4*s.* $11\frac{5}{11}d.$: : 1 : 15.81, the ratio of gold coins to silver bullion in the market. The total expense of exporting gold and silver to Europe, according to various accounts of sales, may be estimated, at the maximum, at 2 per cent.* If to these charges be added the premium given in the United States for gold, we have the total amount of the expense of a payment made in England or France in specie. But in order to compare this payment with that of a bill of exchange on England, it must be observed that bills are computed at \$4 $44\frac{4}{9}$ for the pound sterling, while, in fact, the pound sterling or sovereign, containing 113.0016 grains of pure gold, is equal to \$4 56.57, (as $247\frac{1}{2}$ grains of pure gold in an eagle : 113.0016 : : \$10 : \$4 56.57;) hence, 2.73 per cent. is to be added to the nominal par of the bill to make the real par. But it will be seen by table B, that the average ratio of gold to silver bullion in England, for the last 10 years, is 1 to 15.8, which makes the pound sterling worth \$4 80.92, or $5\frac{1}{3}$ per cent. more than its per value.

The comparison between a payment by bill of exchange, and by shipment of specie, may be made by ascertaining the difference between the value of the pound sterling at nominal par, (444.44) and its real value, according to the ratio of gold to silver in the market, (\$4 80.92) and adding the cost of shipment. The several items which make up this difference may be exhibited as follows:

Suppose £100 payable in London, nominal par.....	\$444 44
Add, for difference between nominal and real par, 2.73 per cent.....	12 13
Real par, at the ratio of 1 to 15	\$456 57
Add, for error in the ratio of gold to silver, (which is 1 : 15.8, instead of 1 : 15) $5\frac{1}{3}$ per cent	24 35
Real par at the true ratio	480 92
Add to this last item, for charges of shipment, and 15 days' interest for realizing the sale of bullion, 2 per cent	9 61.8
	\$490 53.8

*(See Table L.)

Making the payment in specie equivalent to the purchase of a bill at sight at 10.37 per cent. advance, or 9.37 for bills at 60 days.

Upon the supposition that the expense of shipping gold and silver is the same, the premium that may be afforded for gold, when exchange is 9.37 for bills at 60 days' sight, will be $5\frac{1}{8}$ per cent. which is the difference between the United States' ratio of 1 : 15, and the real ratio of 1 : 15.8.

There are remarkable discrepancies in the tables of the rates of exchange and prices current of bullion, which cannot be reconciled, at least with any information now in possession. Table K states the exchange with England for 1821 at $8\frac{1}{2}$, and the premium for gold at the same period 1.94 per cent; the same table gives for 1825 exchange at $8\frac{3}{10}$, and premium for gold $3\frac{3}{10}$. These discrepancies show that the tables of prices current, are either not accurately made up, or that there is not sufficient uniformity in the prices to form a guide.

The United States' dollar contains 416 grains of standard, or $371\frac{1}{4}$ grains of pure silver. The eagle contains 270 grains, standard $\frac{11}{12}$ fine, or $247\frac{1}{2}$ grains of pure gold, making the ratio 1 to 15. Gold, within the last 8 years, has commanded a premium from 1 to $6\frac{3}{4}$ per cent.; this fluctuation is partly owing to the rate of exchange. But a comparison of silver bullion with that of gold, in England, can alone show what is the highest premium which can be afforded for gold in the United States, before silver can be shipped with equal advantage. United States' dollars command in England $57\frac{1}{2}$ pence sterling per ounce, equal to 64.43 per ounce for pure silver. Hence, each dollar is worth 4*s.* $1\frac{4}{5}$*d.* in England. One dollar, in gold $24\frac{3}{4}$ grains pure, or 27 grains standard ($\frac{11}{12}$) is worth (at £3 17*s.* 9*d.* per ounce) 4*s.* $4.48\frac{1}{8}$, and the difference between the gold and silver dollar will be 4*s.* $4.48\frac{1}{8}$—4*s.*, $1\frac{4}{5}d = 2.68d.$ or 5.37 per cent, which is the premium that can be afforded for gold in the United States, when the metals bear these prices, upon the supposition that silver can be shipped at the same expense as gold. The last quotations of bullion make gold £3 17*s.* 9*d.* and dollars 4*s.* 9*d.* the ounce; making the difference $6\frac{1}{4}$ per cent; while the quotations for 1827, '8, make dollars 4*s.* $9\frac{5}{8}$*d.*, and gold £3 17*s.* 6*d.* or $4\frac{3}{8}$ per cent.

It should be observed that this fluctuation in the premium for gold in the United States is not attributable to the exchange with England, but exclusively to the fluctuations in the respective values of gold and silver in that country. But, whenever the difference of exchange, above the real par, is less than the difference between the mint and market relative values of gold and silver, the premium given for the preferred metal will be determined by the rate of exchange, rather than by the relative values of the metals. In proof of this remark, the tables of prices current show, that, when exchange is at or near par, no premium is given for gold; and that, when exchange rose to 12 per cent. gold commanded a premium of about 6 per cent.* The maximum influence of exchange on the price of gold in the United States can therefore only be ascer-

tained, when the premium for bills is so high as to exceed any possible difference between the mint and market relative values of gold and silver, and to make it certain that the premium for gold has risen to the point at which silver can be exported, to pay balances with the same advantage as gold. If the exchange, or its influence on the price of gold or silver, were a true test of their relative values, it would prove a fluctuation more than sufficient to deter any government from attempting to fix them by regulation.

It is because exchange has rarely been so unfavorable to the United States as to raise the price of gold to its maximum, that it has been sometimes confounded with the question of relative values. This consideration suggests, that no reliance is to be placed on an average premium for gold in the United States for a series of years, as a criterion for the ratio of gold to silver; and that the only inference of this nature is to be drawn from the highest rate of premium given for gold, which is to be corrected by the market prices of the two metals in those countries to which they are exported. The highest premium for gold quoted in the prices current is $6\frac{3}{4}$ per cent. which makes the ratio 1 to 16.01$\frac{1}{4}$. The lowest price of gold in England, during the same period, will be found £3 17*s.* 6*d.* an ounce, and the highest price of silver corresponding as to time, is 5*s.* 2*d.* per ounce standard; making the ratio of the pure metal 1 to 15.28. The mean ratio between these extremes, is 1 to 15.64; but the average, deduced from the market prices of the metals respectively in England, as before stated, for the last 10 years, is 1 to 15.8, which shows that a mean ratio between the highest and lowest prices is not to be depended on. Other correctives must, therefore, be found, for which the monetary system of France affords the best lights. In that country, the currency is essentially gold and silver; and in a nation of so much wealth and internal commerce, the quantity of currency being in proportion to its business, the demand for coinage is very great; and the mint being well supplied, especially with silver, is kept in full operation, and gives great activity to the bullion market, which consequently produces an extensive influence upon those of other countries.

By the mint regulations of France, gold and silver are fixed at $\frac{9}{10}$ fine, $\frac{1}{10}$ alloy. The kilogramme of gold (equal to 15434 grains troy, or 13890.6 pure) is coined into 3100 francs; hence one gold franc contains 4.48084 grains pure gold, which is equal to 9.5167 sterling, or $18\frac{104}{1000}$ cents in U. S. gold. The kilogramme of silver, 9-10 fine, is coined into 200 francs; hence one silver franc contains 69.453 troy grains of pure silver; and as 371.25 : 69.453 : : 1 to $18\frac{708}{1000}$ cents, the value of the franc in U. S. silver—difference $3\frac{1}{3}$ per cent; and as 69.453 : 371.25 : : $1 : 5 francs 34.534 centimes, the value of the U. S. dollar in francs, and centimes; and as 4.48084 : 69.453 : : 1 : 15.5, the ratio of gold coin to silver coin in France. The charge for coinage at the French mint is 3 francs per kilogramme of gold, or 3.10 per cent. nearly, and 9 francs per kilogramme of silver,

or 1½ per cent. The mint price of the kilogramme of gold is therefore 3091, and that of silver 197 francs; and $\frac{3091}{197}$ gives 15.69 to 1, as the ratio of silver bullion to gold bullion. Now if all the gold and silver offered in the market can be used at the mint, the market price will never be less than the mint price; but the market price may exceed the mint price; and since the Bank of England resumed specie payments, or for the last 13 years, as stated by Mr. Gallatin, gold has commanded a small premium of from ⅛ to ⅝ per cent. averaging about ½ per cent. If this premium be added to the legal relative value of the gold, the ratio will be as 1 to 15.58. The average value of the U. S. dollar in France is computed at 5 frs. 26.065 centimes, and the true value, as above stated, is 5 frs. 34.534, making a loss of 1.609 per cent. upon the exportation of silver dollars compared with the par of exchange. But it has been shown that gold is worth one half per cent. more than silver, according to the mint ratio; hence the advantage of shipping gold to France is (½ + 1.609=) 2.109 per cent. provided 1t silver dollars will purchase 1 gold eagle in the United States; this added to the difference between the U. S. mint ratio and that of France, (3½) gives 5.409 per cent. for the premium, which may be afforded for gold before silver can be exported, making the ratio 1 : 15.82.

In the statement presented by Mr. Gallatin, the ratio in France is supposed to fluctuate between 1 : 15.69 and 1 : 15.58, but it should be observed that the first is deduced from the mint prices of gold and silver, and the last from a comparison of the value of the coins, allowing for an half per cent. premium on those of gold.

The market prices of silver, however, show the average to be below the mint price; and it is only from the market price of both metals, without regard to the mint price, that the true relative value is to be found. From these it will be seen that the average ratio in England, for the last 10 years, is 1 : 15.8; for the last five years, 1 : 15.81; and in France, for the last 13 years, 1 : 15.82. The near conformity of these rates almost amounts to demonstration of the true relative value of gold and silver. It should be observed that, among the various causes which disturb the values of gold and silver, the restrictions against their exportation have perhaps the most decisive effect, and are the most difficult to estimate. The bullion committee of the House of Commons ascertained that the prohibition of the exportation of gold reduced the price of that which was prohibited 5 per cent. below that which could be lawfully exported. The restrictions imposed by the Governments of the Spanish American continent, although ineffectual as to their object, could not fail to influence very sensibly the values of both metals, and more especially that of silver, which, by reason of its greater bulk in proportion to its value, is the more difficult to conceal. However uniform prohibitory laws may be, the irregularity of their execution by different officers, under various temptations, must necessarily derange the ordinary operations of supply and demand. But as these restrictions give way to a more rational

policy, it may be expected that the price of silver, which has been most affected by them, will be reduced in other countries; and this is probably one cause for the reduction in it which has taken place since the great political changes in Spanish America and Brazil. A view of these considerations has directed the present inquiry mainly to the condition of the bullion market in those countries where there are no restrictions, as furnishing the only data to be relied upon for ascertaining the results sought. The market in France essentially regulates that of the principal countries on the continent of Europe; and the British market, by reason of its extensive connexions, may be considered as controlling that of every other commercial nation in the world; or rather the result of the various influences which affect the values of gold and silver in any part of the world, may be most accurately ascertained where these metals are most extensively used and freely bought and sold, which is in France and England. In pursuing this inquiry into another branch of the subject, it seems to be necessary to refer to the well known fact, that, wherever an erroneous mint regulation exists, the metal rated highest is always used as the standard measure of property; and whether the fluctuation to be corrected has arisen from a superabundant supply of one, or a deficient supply of the other, the only correction that can be safely made, is to increase the mint value of the coins of that metal which has been estimated too low. It would not be proper to change the mint value of that which had been rated too high, because of its immediate and obvious effect on contracts. For instance, all contracts in the United States are now made with reference to the mint value of silver coins: gold being rated too low at the mint for its market value, no payments will be made in it, because silver being made by the mint regulations a tender at a higher rate than its market value, and the payer having his option, will always pay in the coin that pays the most debt in proportion to what it costs him. The most easy change may therefore be made in the value of the gold coin; but, in determining what ought to be the ratio of coins to coins, it is important to keep in view the constant liability of the metals to fluctuation, and so to adjust the ratio, if possible, that, while both metals may be kept in circulation, that which is most desirable for currency may not be at any time estimated lower in the coin than in the market. It is this consideration which constitutes the essential difficulty in the establishment of mint regulations. The fluctuations in the value of gold and silver cannot be controlled; and even the attempt to conform the mint to the market values must produce a change in the latter. But if, after adjusting the ratio at the mint by raising the value of the gold coins, it should happen that silver should rise in the market above the mint value, the silver coins, exchange with foreign countries being unfavorable, would be withdrawn from circulation; and the only remedy within the power of the Government would be to reduce their weight, as is now proposed in respect to the gold coins. Successive changes of this nature must in time subject

the policy of this Government to the reproach which has been so justly cast upon those of the old world, for the unwarrantable debasement of their coins. The contemplated change, therefore, requires to be undertaken with guarded care. Even if it should succeed in bringing gold into general circulation in the United States, the new demand for it thus created must sensibly affect its value, and create a new ratio in other countries; and the Governments which have more than one metal as a standard of property would be obliged to change their mint ratio, or suffer the inconvenience of an exportation of their gold, which might leave our currency in but little better condition than at present. A conventional agreement among the principal commercial nations of the world which desire to use both gold and silver as standards of value, fixing the same relative values, might avert such consequences. But the regulation of the coins of a country is regarded as a high attribute of sovereignty; and, until higher objects of ambition shall overcome the folly of maintaining mere dignity at the expense of the public good, it is not to be hoped that such a measure would be favorably considered.

Each nation has, however, a relief within its own power from all the evils incident to the regulation of the relative value of the metals used for current coins, which is to have one standard measure of property. Great Britain has, after a series of experiments for some centuries in vainly endeavoring to adjust the relative values of gold and silver, come to this conclusion, *in theory at least*, and adopted gold as the proper standard. France maintains both gold and silver in circulation with tolerable success; but her currency is not merely founded on a specie basis; it is essentially a specie currency, having virtually no bank paper to interfere with it. Necessity for both metals in due proportion, keeps up a regular demand for them, which is so extensive as in a great measure to control their relative values.

The policy of the United States in changing the ratio of gold to silver in the coins, may be governed by the probability of effecting such an adjustment as will permanently maintain both metals in general circulation; or, if this be doubtful, by the preference to be given for the one or the other, as a principal medium for currency.

The history of coinage proves that little reliance can be placed on artificial regulations of relative values of the standard measure of property, as a means of maintaining a regular currency of uniform value. Some remarkable instances, as noticed by Lord Liverpool, occurred in England in the reign of James I, and subsequently. Gold being estimated too low at the mint, compared with silver, was freely exported, which caused incessant complaints. To remedy this evil, King James raised the value of gold in his coins, by successive proclamations; but he at last raised it too high; and during the remainder of his reign, and that of Charles I, the silver coins were exported until the complaints were as great for want of silver as they had been before for want of gold. About the middle of the 17th century, during a short period, according to the

same author, the relative values at which the precious metals were estimated in the coins appear to have been in equilibrium with the market prices. But it should be observed that no change seems to have taken place at the mint from 1626 until 1663. As gold had been previously estimated at the mint too high, the market price of it must have raised, to produce the equilibrium above noticed. It appears, however, that, in 1663, the relative value of gold was further raised at the mint in the proportion of 13.346 to 14.485. This must have been done in consequence of a further rise of the price of gold in the market; and yet the new mint value was still too low; for "all the gold coins then made," says the same writer, "would have been immediately exported, if the Government had obliged the people to receive [pay] them as a legal tender at the nominal value given to them in the mint regulation:" "they passed in payment at a higher value than the mint estimate, by general consent of the people."

After noticing these and other facts of the same kind, Lord Liverpool observes, "that, from the beginning of the reign of James I, to that of William III, gold and silver coins were *alternately* exported, to the great detriment of the public, as often as individuals could profit thereby. In 1717, a report of Sir Isaac Newton, then master of the mint, to the Lords Commissioners of the Treasury, states, the mint regulations of relative values to be one pound standard gold in 44½ guineas, at 21*s.* 6*d.*, and one pound standard silver into 62*s.* or 1 to 15.57, and the relative values in the market at 1 to 14⅘ or 15; by which it appears that gold was then estimated at the mint too high: silver was consequently again exported; and as a remedy, it was proposed to take off 10 or 12*d.* from the value of the guinea; or, as a safer experiment, Sir Isaac suggests the diminution, at the present, of 6*d.* in the value of the guinea, "which, by its effects, might show hereafter better than can appear at present, what further reduction would be most convenient for the public." He no doubt foresaw that it was impossible to ascertain, by calculation founded on all the facts that could be collected, what would be the precise effect of a change in the weight of the gold coins; and, hence, with a distrustful caution, proposed an experiment by reducing the weight of the guinea only one half of the ascertained excess in its weight, according to the existing market value of gold and silver.

It seems very clear from these facts, to which many others of later date might be added, that, however exactly the proper equilibrium of values of gold and silver may be adjusted at the mint, the balance is liable to be disturbed by causes which can neither be anticipated nor controlled by political power. If the regulation be founded on the most exact calculation of relative values for the time being, the vibrations of the values of gold and silver must alternately cause the expulsion of each: and where one metal is more essential to public convenience than the other, the adjustment which exposes that under any circumstances to general exportation or melting, may become a greater evil than a regulation

which constantly excludes from circulation the less desirable coin. These difficulties had long been a matter of great concern in England, although it was not well settled in public opinion which metal was the best suited for the currency of that country.

"The coins," says Lord Liverpool, "were in a great state of confusion;" and neither Sir Francis Bacon nor Sir Edward Coke, though especially consulted, appear to have been able to propose a remedy. Sir William Petty first, and subsequently Mr. Locke, "asserted and maintained the opinion that coins which were to be the principal measure of property could be made of *one metal only;*" and Mr. Locke insisted that "silver was the most fit metal for a standard measure of property."

In 1774, a partial experiment was tried. Silver was made a tender for payments not exceeding £25; and, subsequently, in pursuance of the report of Lord Liverpool, viz: in 1816, a further experiment was made by reducing the payments in silver to 40*s.* It may be observed, that, although public opinion in England is favorable to gold as a standard measure of property, yet, under the last arrangement, it was thought expedient to protect the silver coins by a charge for seignorage of 4*s.* for the pound weight. This proves that silver currency was deemed indispensable. It is not known that any inconvenience has been experienced in England from the exportation of the coins since that time. Indeed this could scarcely have occurred, because, gold being substantially the measure of property, nothing but unfavorable exchanges could, under ordinary circumstances, affect the gold currency; and silver being estimated, not only in the coins, (66*s.* to the pound,) but at the mint, (62*s.* to the pound,) above the highest market price, the silver coin could not be withdrawn from circulation. This leads to a consideration of the effect which may be produced on the currency by a charge for coinage at the mint. This charge is termed *seignorage* and *brassage*, or by the French *retenue.* It is virtually a charge for the manufacture, and may either be made simply to meet expenses, or for profit and revenue to the Governments. It is paid in the first instance by the holder of the bullion, who receives a remuneration, not in the same weight of coined metal, but in the increased legal value of a less quantity, which is made by law a tender for as much as it was valued at when delivered at the mint. The coinage, therefore, costs the holder nothing, except what he pays as a member of the community, whose property is affected by the depreciation of the standard measure.

Standard silver bullion had, for a long time, been received at the English mint at 62*s.* for the pound weight, and paid out at the same rate; but when the silver coins became so light that 66*s.* scarcely weighed a pound, they were bought in at 62*s.* and re-coined and re-issued at 66*s.* If the loss of weight by wear had been equal to 4*s.* in the pound, there would have been no gain to the Government by the operation, nor loss to the community; the number of pounds of silver, and that of shillings too, being the same as before the new coinage took place, no seignorage

was paid in the process. But the determination subsequently to receive silver bullion at 62*s.* for a pound weight, and issue coins at 66*s.* constitutes a charge of 4*s.* on each pound of silver coined, in the nature of a tax. It has been plausibly urged that a charge for coinage is of great importance in preserving a wholesome uniformity in the currency, and protecting the coins from exportation; and some nations have evidently established mint regulations ostensibly founded on this theory. It is certain, that, where two metals are used as standard measures of property, the coins made of one of them may be protected by a seignorage as long as those of the other, not having this protection, will supply the demand for exportation. But, if the relative value of the coins is properly adjusted, an equal seignorage on the coins of both metals can afford no permanent protection to either. The effect will be to raise the nominal rate of exchange to as much as the difference between bullion and coin, when the exportation will be made as freely as though no seignorage was charged.

A further effect of a charge for coinage is to fix one price for bullion at the mint, and another for the same quantity of metal in the coins. There may be, therefore, three distinct prices for the metal, at the same time, each influencing in some degree both the others. While the market and mint price of bullion correspond, or while the former shall not exceed the value of the coins, these will not be exported; but, if the market price of bullion exceeds the mint price, none will be sent to the mint, if a seignorage is to be paid; and the coinage ceases.

It seems to have been supposed that the difference between the mint price of bullion and the mint value of coins afforded room for a fluctuation in the price of bullion to a certain extent, without affecting the coinage. But this is not essentially the fact. The price of bullion is estimated in the current coin and standard measure of property; and wherever a demand for any other purpose than coinage exists, although the price may not be so high as to cause the existing coins to be melted, yet it will withdraw the supply of bullion from the mint, and thus indirectly affect the currency in the same manner as if a portion equal to the usual coinage for the same time was exported or melted. And whenever the bullion in the market is inadequate to the demand, the quantity of pure metal in the coin being the only measure of their value for any other purpose, the transition from the market price of bullion to the mint value of coins will be more rapid than if the prices were governed by the unrestrained laws of supply and demand. Hence, in practice, it will be found that the currency is probably not more stable under the supposed protection of a seignorage, than where none is charged, or when a sufficiency only is retained to defray expenses.

There are some objections to the charge for coinage, well worthy of consideration. It necessarily causes a greater number of pieces of the same value to be coined from the same quantity of metal, and affects the value of contracts, which may be paid in a less weight of metal after

such a regulation than before. The difference operates as a premium for counterfeiting even in the standard metal; to which being added a small deficit in weight and fineness, that operation may be carried on with increased success. If a high seignorage be charged on one metal, the coins thus retained in circulation by long and frequent use must become sensibly depreciated; and the lighter they are, the more reluctant every individual into whose hands they fall will be to send them to the mint or melting pot: they are therefore kept in circulation as long as possible, until public institutions and money dealers refuse to receive them by tale, when a shock is produced, and the whole loss, as well on the counterfeits as the real coins, will fall suddenly upon those who are least able to bear it. Instances of this kind have occurred in Europe, and sometimes threatened serious convulsions, which have either ended in the imposition of a tax on the people, to supply the loss to the holders of the light coins, or in a new coinage, debased to correspond with the depreciation; and the evil has probably more than counterbalanced all the benefits derived from seignorage or other measures to prevent melting or exportation of coins. This subject may be more practically considered by referring to the actual fluctuations in the price of gold in the United States during the last ten years, varying in relative value from 1.15 to 1.16, under which it would have required a seignorage of $6\frac{3}{4}$ per cent. to protect the gold coins.

The holder of gold bullion could afford to send it to the mint when it was at or below the mint price; but the coinage must cease whenever the price of gold rose above 15 to 1: and, on the other hand, the exportation of gold coin could not be made until the price of bullion exceeded 16 to 1 of silver. Coinage must therefore be made when pure gold bullion could be bought for \$19 $39\frac{1}{3}$; and the channels of currency could not be drained until it rose to \$20 68 the ounce. As long as the prices ranged between these points, silver would be exported in preference to gold, and the gold coins would be wasting by use: none could be taken from the currency, nor any added to it. To avoid this consequence, the mint prices of bullion should approach nearer that of the coins; or, in other words, the seignorage be reduced. But there is no certain rule to determine what ought to be its amount to avert the effects of the fluctuations in the price of bullion, and at the same time to promote an adequate supply of new coins to maintain a wholesome currency. It would seem to be most safe not to attempt much by way of remedy for one evil, which must inevitably create another.

The public mind is not a little prone to delusion on the subject of precious metals and money, which has no doubt caused much injudicious legislation on these subjects. Money being merely the representative and measure of property, its value consists in its adaptation to the payment of debts. Every successful effort, therefore, to confine it within given limits, must embarrass its application to the only purpose for which it is wanted; and, unless it can be shown that a tax upon the

payment of debts will promote national wealth, a seigniorage, or any other measure of that nature, must appear to be injurious. The efforts to secure the currency by restricting the exportation of the precious metals, have always proved unavailing, by reason of the impossibility of executing them, except so far as the penalties of the law cost the exporters a small premium by way of insurance against detection. When laws prohibiting the exportation of British gold were executed with the utmost rigor in England, the difference of price between the gold that could not and that which could be lawfully exported, as before observed, was about 5 per cent. As long as commercial intercourse is continued among nations, debts between them must be liquidated, and the precious metals are, by universal consent, regarded the safest standard in which to estimate not only the prices of merchandise, but to test the value of all paper currency.

The transactions between the people of different nations are similar to those between a number of merchants: the balance due from one to another is paid by the transfer of a debt due from a third, if the third nation happens to be a creditor of the second to the same amount of the debt due from the first, and no more. The operation is performed on paper, and exchange is at par between all of them; but if, when this amount is adjusted, a balance remains due to one, which can be paid in nothing else more advantageously, it must be paid in the standard agreed upon among them, viz: the precious metals; and when these are to be procured for that purpose, the current coins are liable to be withdrawn from circulation. But if the operations of the mint of the debtor nation fix a value on either of them, above their market value for exportation, this artificial advance is virtually a tax upon the payment of the debt: the creditor estimates the payment by its weight in pure gold or silver; and the debtor merchants must therefore pay the tax, or pay interest upon the debt, until some other means of payment are devised.

It may be said that it is better to pay interest than to drain the channels of currency. This might be the case if there were no other relief or safe remedy for overtrading. But it should be observed that a demand for the precious metals to pay debts stimulates increased exertions to procure them wherever they are to be found. Hence a supply, except in extraordinary cases, will be generally furnished. But when the disposition to overtrade continues, and the specie is withdrawn from the banks to pay debts abroad, the banks, if well conducted, will abstain from discounting new paper, or extending the means of contracting further debts; thus curing the diseased appetite by low diet. And the more readily specie can be applied to these payments abroad, the more vigilant the banks are obliged to be in interposing this check. Hence there is less danger of their making excessive issues of paper beyond their specie means, which are a sure test for the real wants of the country, wherever wants are regulated by the ability to pay.

The easy adaptation, therefore, of coins for the payment of debts, pro-

motes prompt payments, restrains speculations, and lessens all the other evils incident to the licentious issues of bank paper. A seigniorage on either metal, of sufficient amount to affect the currency, is of the same character with the prohibitions of the exportation of specie, and is liable to most of the objections to that measure. The difference is chiefly in degree. It could not, therefore, be beneficially adopted to such an extent; but a charge of small amount on both metals, equivalent to the expense of coinage, would not be liable to the same objection, and would remunerate the mint for the expense to which it is now subject, that of coining, merely for the purpose of putting the metal into a form better suited for exportation.

It remains to be considered whether gold or silver is the most convenient currency for the United States. It has already been observed, that, prior to the year 1821, gold and silver generally bore the same relation in the market of the United States, which they did in the mint regulation. Silver sometimes commanded a premium for the India trade. But, at no time since the general introduction of bank paper, has gold been found in general circulation. It may not be necessary here to inquire minutely into the causes which prevented the ratio of gold and silver in Europe from affecting the price of gold in the United States prior to 1820. The fact that gold did not circulate in the United States at a time when it commanded no premium, is sufficient to prove that other causes than an erroneous mint regulation have excluded, and may still continue to exclude it from circulation. These are to be found partly in the operations of our banks. Bank paper supersedes the use of gold for large payments; and whether preferred or not by the people, the banking system, if it may be called system, will most probably exclude the circulation of both gold and silver, to the whole extent that bank paper can be made a substitute for them. As to gold, the substitution is complete, while there is a paper medium in tolerable credit that will circulate throughout the United States. But this is not the case as to silver. Notes of very small denomination are soon defaced and worn out by frequent use, and counterfeits are less easily distinguished than those which are not so much used: hence some of the States have prohibited their emission and circulation, and the convenience arising from it may induce others to follow the example.

Silver, being substantially the only standard measure of property, is the basis on which the credit of bank paper is founded; and when any portion of the small notes is withdrawn or expelled, silver, being best adapted for small coins, takes their place. Gold cannot be so well employed for this purpose; pieces $\frac{1}{15}$ of the size of the small silver coins are unfit for circulation. So precious a metal is only suited for coins of the larger denominations. There are probably other causes; but, whatever these may be, experience alone has proved the fact that gold could not be made to circulate freely with bank paper and silver; even although the paper was based on specie, and there was no visible error in the mint ratio.

Mr. Lowndes, in a report made to Congress in 1819, states "that gold can scarcely be considered as having formed a material part of our money circulation for the last 26 years;" and although he attributes this fact to the erroneous ratio in the mint regulation, yet it does not appear from the market price in the United States, during the whole of that time, that gold was more valuable for exportation than silver. On the contrary, it will be observed, by reference to table B, that in England, prior to 1810, the ratio of gold to silver had, for fifty years, averaged at less than 1 to 14.75, and at no period of 10 years as high as 1 to 15. These facts explain the reason why gold did not, at that period, command a regular premium; and when connected with the fact that it did not then circulate, they demonstrate that some other causes than erroneous mint regulations have excluded it. Whether these have been correctly explained or not, it is very clear that an exact adjustment of relative values cannot be expected to bring gold into general circulation. Silver is, therefore, the preferred metal for our currency.

It may be further remarked, that we have had long experience of a currency without gold, and but very little of a currency without silver. The inconvenience of the former is scarcely felt, but that of the latter was insupportable. We have, however, had no experience of a gold currency without silver. But it would not be difficult to foresee, that, if any event should drain off the silver, its place will be supplied, not by gold, but by small bank notes and paper tokens, which are the most obnoxious of all the various materials for currency.

Much has been written in England to prove that gold is the most fit metal for a standard measure of property. The principal argument relied upon to prove this is, that, being more precious, it is less liable to fluctuate. An inspection of table EE will show that it has no advantages over silver in this particular. And it may be remarked, that, notwithstanding the preference given to gold, by law, in England, in making it the principal standard, the silver coins are deemed so essential to a wholesome currency, that they are protected by a seigniorage of 6.48 per cent. If it be true that gold is less essential, as a current medium for the United States, than silver, and that a drain of the silver coins would be attended with serious inconvenience, it is very desirable that the mint value of gold should be so low as to prevent the possibility of silver being preferred to gold for exportation. For whatever inconvenience may be felt in the currency from unfavorable exchange, its force will, in that case, be broken by the exportation of the gold, before it reaches the silver; giving the banks time to prepare for protecting the latter.

Should a change be made in the relative value of gold and silver in the United States coins, there is some reason for conforming the regulation to that of France, founded in the consideration before adverted to; that of establishing a common regulation among the principal commercial nations of the world, which use both metals as standard measures of property. Another reason for adopting this ratio, is that there would

be little danger of its causing the exportation of silver in preference to gold. But it ought not to be expected that it would bring gold into general circulation with silver in the United States.

Nor does the subject admit of such regulation as to enable the government to accomplish with certainty that result. The values of gold and silver, compared with each other, as already shown, are liable to fluctuations, resulting from the operations of human enterprise, the political convulsions of nations, and from the laws of nature, which can neither be anticipated, controlled, nor averted. And even if all other causes which affect the supply and demand of the precious metals were uniform, every new mint regulation, changing the legal relative values with a view to conform them more nearly to the true values, must produce a change in the true value of the metals, by creating an increased demand for that which is raised, the extent or effect of which cannot be calculated; and hence a new fluctuation is caused by the measure designed to correct an existing error.

It must be evident that a mint regulation in the United States, which would bring gold into general circulation, must withdraw a portion from some other channel, and enhance the price, which, if found inconvenient, might induce a new regulation by other governments, to draw it back. The subject is in its nature one of great difficulty; and the most judicious measure which can be suggested deserves only to be considered as an approximation to any given result. There is no doubt but gold could be made the basis of our bank currency, and of course would become the principal material for bank deposits. But a bank paper, convertible into gold, would not circulate less freely than a paper convertible into silver; and unless the paper currency of the United States shall be generally abolished, by confining the issues to very large notes, there can be no well grounded hope that any regulation will bring gold and silver into joint and general circulation. All that can be expected is that bank paper may be made equally convertible into both metals; and if this desideratum were obtained, it is very certain that whenever any charge should occur in the market, to drain off the silver coins, instead of gold coins supplying their place, it would be immediately occupied by the worst species of paper currency, small bank notes and tokens.

Amidst all the embarrassments which have surrounded this subject since the adoption of metallic standards of property, it is remarkable that Governments have so tenaciously persevered in the effort to maintain standards of different materials, whose relation it is so difficult to ascertain at any one time, and is so constantly changing; and more especially when a simple and certain remedy is within the reach of all. This remedy is to be found in the establishment of one standard measure of property only. The evil of having two or more standards arises, as already observed, from the impossibility of so fixing their relative values by law that one or the other may not, at times, become of more

value in the market than estimated by regulation; and, when this happens, it will be bought and sold according to its market value, regardless of the law.

The proposition that there can be but one standard in fact is self evident. The option of Governments charged with this duty is therefore between having property measured sometimes by gold and sometimes by silver, and selecting that metal which is best adapted to the purpose for the only standard. Why the latter course has not been universally adopted, it is not easy to explain, unless it may be attributed to that prevalent delusion which seeks to secure the possession of gold and silver by restraining their exportation, and avoiding the payment of debts rather than improving the public economy by giving every facility to it. It would seem strange, however, that, while every individual who had a deposite of money in bank, or in his chest, (unless he is sufficiently deranged to think of hoarding it,) would be wholly indifferent whether it were gold or silver. Governments should persevere in maintaining a different theory. But such has been the fact. The history of coinage abounds with mint regulations to keep gold and silver together, and statutes prohibiting, under severe penalties, the exportation of either; all of which have disappointed every expectation of their projectors. The adoption of one metal as a standard measure of property is recommended by its simplicity. No change in the mint regulations can ever be required, and it removes every pretext for dishonest or unwise Governments to debase their coins. All other metals may be imported as freely as before, and, like other articles of merchandise, applied to the payment of debts. The standard coins could not be withdrawn from circulation except by an unfavorable exchange, which is to be corrected by selling more or buying less, not by refusing to pay. That there must be some fanciful delusion, originating in the love of money, that induces such pertinacious adherence to the maintenance of two standard measures of property, can scarcely be doubted. All agree that measures of weight and capacity should be based on a unit, determinable by some fixed law of nature; and none will pretend that this measure could be perfected by referring to two or more variable laws, having no connection or equalizing principle to correct their aberrations: yet such is the theory of two standard measures of property.

It may, indeed, be alleged that the supply and demand, or value of either gold or silver, is not governed by an invariable law; but this will not prove that the value of both is less variable than that of either, and still less that the variations of the one will counteract those of the other. Much might be said to prove that the standard measure of property should be made of a metal sufficiently abundant to enter into general circulation, determining values in small as well as large transactions. The whole productive wealth of a nation is but the aggregate of accumulations from small transactions; and the character of the English monetary system, which has one standard measure for small payments, and

another for large ones, may be practically understood when it is observed that a tenant, who receives in payment for his products silver tokens at 66 shillings for the pound, equal to 71*s.* 4½*d.* the pound for fine silver, may be obliged to pay his rent and taxes in a medium wherein this pound of fine silver will only pay $64\frac{43}{100}$ shillings; making a loss to him of about 9.7 per cent. on all that part of his income which may be demanded of him in sums over 40 shillings. Such would inevitably be the consequence of a redundant coinage of silver. How far the evil may be practically averted by restricting the coinage and keeping the supply of shillings short of the demand, whereby their price may be kept above their intrinsic value, can only be known by practical observation. But it can scarcely be possible, under any state of things, to convert a sum of money in silver coins into gold without paying at least the difference between the mint price of silver and the nominal value of the silver coins, (viz: 66—62) near 6½ per cent.

The only defence of such a system is, that people, knowing the value of the tender, may make their contract with reference to it. But those who are most liable to suffer by the system cannot be expected to calculate the difference between the mint and market values of gold and silver from day to day: all they can do is to make some approximation to it; and even that will probably be neglected in most of the small transactions.

Such is the monetary system in England, as commenced in 1774, and established in 1816. Its error seems to have arisen from a deceptive prejudice in favor of gold as a standard measure of property, while experience had shown that silver could not be dispensed with in the currency; wherefore an attempt was made to reconcile necessity to prejudice by establishing gold as the general standard, and protecting a debased silver coinage for small payments by a seignorage and an excessive valuation at the mint.

The same effect, in a degree, will be produced by any measure that shall introduce into the currency, for small payments, any medium which is not itself a standard measure of property. It is unfortunate, perhaps, that the people are so little disposed to resist impositions of this nature: they often consent to accept depreciated tokens, and pay the discount for converting them into the standard money, rather than contend for what seems to be a small matter; hence such a currency is readily forced into general circulation, as soon as the standard medium can be expelled.

If these views be correct, silver ought to be the standard measure of property in the United States, and maintained by mint regulations, as the chief material for metallic currency. But if there were no paper medium like that of the Bank of the United States, circulating freely in all parts of the Union, and everywhere convertible into the standard, at a very moderate discount, gold coins would be almost indispensable. Without them, every traveller, even from State to State, and often from

one county to another, must either encumber himself with silver, or be exposed to vexatious embarrassments and impositions.

In conclusion, should it be determined to maintain both gold and silver as standard measures of property, without changing the ratio, it will be advisable to discontinue the gold coinage whenever the premium for gold shall exceed 2 per cent. The mint may be employed in coining silver; and an assay of gold bullion will, at a small expense, answer every purpose now derived from coining it. But if it be deemed expedient to change the ratio, the extent of the alteration is a matter of considerable importance.

To adopt the ratio of France, might tend to a general conformity of mint regulations among different nations, and, in time, remove that cause for fluctuation which proceeds from the successive changes of their respective mints. It may be objected to this measure, that gold is evidently estimated too low at the French mint; and although the premium for it in the United States market would be reduced $3\frac{1}{10}$ per cent. it would still be high enough to withdraw the gold coin from the banks and entirely prevent its circulation.

It has been already shown that the relative value is about 1: 15.8. If it be intended to render gold and silver *equally* attainable in the United States, proper allowance being made for the influence which an increased demand must have on the price, a ratio of 1 to 16 would, in all probability, be necessary. The objection to this measure is, as already observed, that, when the ratio is so adjusted as to maintain both metals, for the time being, in equilibrium, subsequent fluctuations may expel that which is most necessary to the currency. But if it be deemed advisable to maintain the silver currency as the general standard of property, and, at the same time, preserve a sufficient quantity of gold for the occasional uses in which it may be preferred to silver or bank paper, which, under all circumstances, promises the most favorable result, gold should be estimated in the coin, somewhat, but not much, below the market value of bullion.

If the ratio of gold to silver in the market be not more than about one per cent. higher than it is estimated at in the coins, there will be little danger of its being wholly withdrawn from circulation. Silver, being a standard measure of property, and legal tender to any amount, may be obtained from banks without the expense of brokerage. But not so as to gold; the broker's charge for purchasing will not be less than $\frac{1}{4}$ per cent.; and the uncertainty of realizing the remaining difference in the foreign market, will leave it in the power of the shipper to offer but an inconsiderable inducement to the holders of gold coins to sell them: and, although gold would still be preferred for exportation, a sufficient quantity might generally be retained to supply all the material purposes for which it will be wanted, or can be used, under the present state of the paper currency.

It is of considerable importance, in fixing the ratio between gold and

silver, to select one which can be expressed in definite numbers, and more especially admit of an expression of the weight of the coins, in both pure and standard metal, without an indefinite fraction. Such numbers facilitate the calculation of exchange, and the detection of light or spurious coins. When this object can be obtained, without deviating too sensibly from the ratio proper to be established, it is worthy of attention.

The ratio suggested by Mr. Gallatin, 1: 15.609, is liable to objection on this account—not only the ratio, but the weight, of the coins in pure metal, is incapable of a definite expression. It is also believed that it estimates gold rather too low to accomplish, with reasonable certainty, the object desired. The ratio of 1: 15.625* is free from the first, and less liable to the second objection. It leaves the value of gold bullion in the market at 1 $\frac{12}{100}$ per cent. above that in the coin; and although it may be doubtful whether it does not estimate gold still too low, yet the error, if it prove to be one, is on the safe side. This ratio will render the weight of the eagle, in pure gold, 237.6 grains, and in standard, ($\frac{11}{12}$ fine) 259.2 grains; making the eagle, as now coined, of 247½ grains pure, worth $10 41$\frac{2}{3}$, and the corresponding value of the pound sterling will be within $\frac{4}{1000}$ parts of a cent of $4 75.6. These results seem to recommend the ratio 1: 15.625 as decidedly preferable to any other, there being no other numbers near the desired point that will bear such a relation to those with which it must be connected, as to admit of a common multiple, which object is happily attained in the proposed ratio.

In concluding this report, the Secretary of the Treasury has to remark, that it has assumed a more discursive form than may seem to have been called for by the letter of the resolution of the Senate: but, in looking to the object of the Senate, as inferred from the inquiry directed, it has seemed proper to present such views and facts as appeared calculated to facilitate their further investigation of the subject. It was, moreover, not easy to separate, distinctly, the inquiry as to the true relative value of gold and silver in the market, from that which might be deemed a proper ratio in the coins, or from the various considerations which might determine the expediency of a greater, or less, or any change, in the existing mint regulations.

Several interesting communications in relation to the general subject, contributed by correspondents, together with various tables and calculations, deemed worthy of preservation, are appended.

All of which is respectfully submitted.

S. D. INGHAM,
Secretary of the Treasury.

TREASURY DEPARTMENT, *May 4th*, 1830.

* For the weight of the eagle, according to various ratios, from 1: 15 to 1: 16, see Table G.

A.

Comparative values of English, French, Spanish, and United States Coins.

The fineness of English and United States' gold being 22 carats, or $\frac{11}{12}$, an ounce of it must contain 440 grains pure, and 40 grains alloy; and it is minted into £3 17*s.* 10½*d.*, or 934½ pence. Therefore, as 934.5*d.*: 240*d.*:: 440: 113.0016 grains, the weight of pure gold in one pound sterling or gold sovereign.

The United States' gold eagle contains 247½ grains pure, and 22½ grains alloy: therefore, as 113.0016: 2475:: 240*d.*: 525.657*d.*, the sterling value in British gold of one eagle: hence, that of the dollar is 52.5657*d.*, or 4*s.* 4.5657*d.*

Again: the standard fineness of British silver is $\frac{37}{40}$; therefore, 1*oz.* of it must contain 444 grains pure, and 36 grains alloy, and is minted into 5*s.* 6*d.*, or 66 pence.

The United States' and Spanish dollar contain 371¼ grains pure, and 44¾ grains alloy; the fineness in each being $\frac{1485}{1664}$. Therefore, as 444: 66, or 74: 11 :: 371.25: 55.1858 = 4*s.* 7.1858*d.*, the value of the dollar in sterling silver. Hence, as 52.5657: 55.1858:: 100: 104.985, or five per centum nearly, the difference of its value in sterling gold and silver.

Again: as 11: 74 :: 240*d.*: 1614.5454 grains of pure silver in one pound sterling or British sovereign.

Again: since 4*s.* 6*d.* is $\frac{9}{40}$ of a pound sterling, it will be as $\frac{9}{40}$: 1:: 1: 4.44$\frac{4}{9}$; differing from the estimated par of one pound, $4 44, by $\frac{4}{9}$ per centum: and as 66*d.*: 54*d.*:: 444: 363$\frac{3}{11}$ grains pure silver in 4*s.* 6*d.*, which is 7$\frac{43}{44}$, almost 8 grains less than 371¼ grains, the quantity in one dollar.

As 113.0016: 1614.5454 :: 1: 14.288, the ratio of the value of silver to gold in the British monetary system; and as 24.75: 371.25:: 1: 15, the ratio of the same in the coins of the United States. Therefore, it will be as 14.288: 15 :: 100: 105$\frac{1}{24}$, or more than five per cent. difference in the comparative values of silver.

Again: as 416: 480:: $1: $1.1538, the value of 1 ounce United States' standard silver; and as 371.25: 416:: $1.1538: $1.2929, the value of 1 ounce of pure silver. Hence, 1 grain of these is value for .002404, and .0026936, of a dollar, respectively. Also, as 247.5: 440 :: $10: 17\frac{7}{9}$, the value of 1 ounce United States' gold; and as 11: 12:: 17$\frac{7}{9}$: 19\frac{3}{33}$, the value of 1 ounce do. pure. Hence, 1 grain is worth .040404.

Again: as 113.0016: 440:: £1: £3 17*s.* 10½*d.*, the value of one ounce sterling gold; and as 11: 12:: £3 17*s.* 10½*d.*: £4 4*s.* 11.45*d.*, the sterling value of 1 ounce pure gold. Likewise, as 37: 40:: 66*d.*: 71¼*d.*, = 5*s.* 11¼*d.*, the value of one ounce pure silver in sterling money.

The kilogramme is equivalent to 15434 grains Troy; and a kilogramme of French standard gold, $\frac{9}{10}$ fine, is minted into 77½ forty franc pieces of gold. Hence, one gold franc must contain 4.48084 grains of pure gold. Therefore, as 113.0016: 4.48084:: 240*d.*: 9.5167*d.* sterling, the British value of the gold franc in British gold. Again: the kilogramme of French standard silver, $\frac{9}{10}$ fine, is minted into 200 francs: hence, the pure silver

in one franc is 69.453 grains: therefore, as 74: 11:: 69.453: 10.324*d.*, the value of the silver franc in British silver.

Lastly: as 247.5: 4.48084:: $10: $18\frac{14}{100}$ cents, the value of the gold franc in United States' gold; and as 371.25: 69.453:: $1: $18\frac{708}{1000}$ cents, the value of the silver franc in United States' silver: and as 4.48084: 69.453:: 1: 15.5, the ratio of the value of silver to gold in the monetary system of France.

The British copper penny is the twenty-fourth part of one pound avoirdupois, or of 7,000 grains Troy: hence, one penny must weigh $291\frac{1}{4}$ grains, and it is estimated $\frac{54}{100}$ of our dollars. Therefore, as 1*d.*: 54:: $291\frac{1}{4}$ *grs.*: $157\frac{11}{40}$ grains, the proportional weight of one cent. But the United States' cent weighs 208 grains, being nearly $50\frac{3}{4}$ grains more than its equivalent in British copper coin; that is, about $32\frac{1}{4}$ per centum. And as 208: 7,000:: 1: $33\frac{17}{26}$ cents per pound avoirdupois, the value of the copper. Consequently, when the market price of copper exceeds 34 cents per pound, cents will disappear, as eagles and dollars do when their market price exceeds their mint value.

B.

[See Page 649.]

The ratios of gold to silver, from 1760 *to* 1829, *with the averages for each ten years, and the total mean average for* 70 *years.*

Years.	Pure gold to pure silver.	Average for ten years.	Years.	Pure gold to pure silver.	Average for ten years.
1760	14.29 to 1		1795	14.77 to 1	
1	13.94 : 1		6	14.77 : 1	
2	14.63 : 1		7	15.45 : 1	
3	14.71 : 1		8	15.45 : 1	
4	14.91 : 1		9	14.29 : 1	14.94 : 1
5	14.69 : 1		1800	14.81 : 1	
6	14.41 : 1		1	14.47 : 1	
7	14.45 : 1		2	15.23 : 1	
8	14.58 : 1		3	14.47 : 1	
9	14.45 : 1	14.51 : 1	4	14.67 : 1	
1770	14.35 : 1		5	15.14 : 1	
1	14.36 : 1		6	14.25 : 1	
2	14.19 : 1		7	14.46 : 1	
3	14.73 : 1		8	14.79 : 1	
4	15.05 : 1		9	16.25 : 1	14.85 : 1
5	14.62 : 1		1810	16.15 : 1	
6	14.34 : 1		11	15.72 : 1	
7	14.04 : 1		12	15.04 : 1	
8	14.34 : 1		13	14.53 : 1	
9	14.89 : 1	14.49 : 1	14	15.85 : 1	
1780	14.43 : 1		15	16.30 : 1	
1	13.33 : 1		16	13.64 : 1	
2	13.54 : 1		17	15.58 : 1	
3	13.78 : 1		18	15.42 : 1	
4	14.90 : 1		19	15.82 : 1	15.41 : 1
5	15.21 : 1		1820	15.71 : 1	
6	14.89 : 1		21	15.98 : 1	
7	14.83 : 1		22	15.91 : 1	
8	14.71 : 1		23	15.91 : 1	
9	14.89 : 1	14.45 : 1	24	15.64 : 1	
1790	15.01 : 1		25	15.69 : 1	
1	14.95 : 1		26	15.69 : 1	
2	14.43 : 1		27	15.77 : 1	
3	15.01 : 1		28	15.77 : 1	
4	15.32 : 1		29	15.95 : 1	15.80 : 1

Total mean for 70 years, 14.92 : 1.

DEPARTMENT OF STATE,
Patent Office, March 31, 1830.

SIR: In compliance with your request "to calculate in United States' currency the value of the different current coins and moneys of account rated in *Kelly's Cambist*, the weight and fineness of which have been ascertained at the British mint; and, also, to give any information I may possess respecting the wear of gold and silver coins," I have the honor to transmit the accompanying papers on these subjects;

And remain, with sentiments of esteem, respectfully, yours,

JOHN D. CRAIG.

Hon. SAMUEL D. INGHAM,
Secretary of the Treasury.

The following table (C) exhibits the value of various current coins in United States' currency, estimated by the weight of pure silver contained in each, at the rate of 371¼ grains for 100 cents.

Table D exhibits the like value of various moneys of account, estimated in the silver currency of the respective countries in which they are used.

These tables are a guide for ascertaining the true par of exchange with all places where silver is a standard measure of property, and is valued in the coins as high, or higher, in proportion to gold, than it is in the market, which is believed to be the fact, generally, throughout Europe, Asia, and America: England, and some of the West India Islands, are, perhaps, the only exceptions. But when gold is the only general measure of property, as in England, or when gold coins are estimated by law above the market value of bullion, as in Cuba, &c. the value of coins and moneys of account should be estimated in gold, in order to ascertain the true par exchange, and to determine the basis for calculating ad valorem duties at the custom house.

C.

A TABLE of Silver Coins, with the weight of pure silver in each, as determined by assays at the London and Paris mints, and their corresponding values in cents; 371¼ grains being worth one dollar.

	Pure silver. Weight in grains.	Value in cents.
Austrian Rix dollar	355. 5	95. 758
Denmark do	388. 4	104. 620
English Crown	429. 7	115. 744
Franc (of 1818)	69. 4	18. 694
Geneva Patagon	351. 0	94. 545

TABLE C—Continued.

	Pure silver. Weight in grains.	Value in cents.
Genoa Scudo	565. 5	152. 324
Hamburg Rix dollar	397. 5	107. 070
Hanover Florin	200. 3	53. 953
Holland do	146. 8	39. 541
Lubec Rix dollar	391. 9	105. 561
Milan Scudo	319. 6	86. 088
Naples Ducat	295. 4	79. 569
Poland Florin	84. 0	22. 626
Portugal Crusado	198. 2	53. 387
Russian Rix dollar	359. 0	96. 700
Do Florin	198. 4	53. 441
Roman Scudo	371. 5	100. 067
Russian Rouble of Peter the Great	312. 1	84. 068
Do Catharine the First	309. 9	83. 474
Do *Peter the Second*	310. 0	83. 502
Do Anne	317. 2	85. 441
Do Elizabeth	321. 8	86. 679
Do Peter the Third	277. 5	74. 748
Do Catherine the Second	275. 9	74. 316
Do Paul	280. 8	75. 636
Do Alexander	278. 1	74. 909
Russian 10 copec piece (1802)	28. 3	7. 623
Do 5 do (1801)	15. 3	4. 121
Sardinian Scudo	324. 7	87. 460
Saxon Rix dollar	358. 2	96. 485
One-sixth Thaler (*1808*)	42. 1	11. 340
One-sixth Thaler of Jerome (1809)	43. 7	11. 771
Netherland Florin	148. 4	39. 973
Parma Ducat	357. 9	96. 404
Sicilian Scudo	348. 2	93. 791
Do Piece of 40 grains	117. 5	31. 650
Do do 20 do	59. 1	15. 919
Sierra Leone Company's 10 macutas	330. 8	89. 004
Do do piece of 5 macutas	167. 4	45. 091
Do do do 2 do	65. 0	17. 508
Do do do 1 do	32. 5	8. 754
Spanish old square Mexican dollar	376. 1	101. 306
Do Seville dollar	376. 1	101. 306
Do old Mexican Peceta (1736)	93. 6	25. 212
Do Real of Mexican Plate (1746)	46. 8	12. 606
Do Mexican dollar with globes (1765)	377. 4	101. 656
Do Real of Plate (1721)	35. 9	9. 670
Do Real (new) do. (1795)	36. 1	9. 724
Do Dollar, late coinage	370. 9	99. 905
Do Half dollar, do	185. 4	49. 940
Swedish Rix dollar	388. 5	104. 647
Do Double Platt, or piece of 2-3	259. 6	69. 926
Do Piece of 8 skillings	63. 8	17. 185
Switzerland Rix dollar	360. 1	96. 997
Florin of Lucerne	96. 8	26. 074
Treves Rix dollar	359. 0	96. 700
Turkey Piastre (1801)	95. 7	25. 778
Do do (1818)	67. 7	18. 236
Tuscany Lira (1803)	53. 4	14. 284
Scudo Pisa of Etruria	385. 0	103. 704
Venice Scudo of 10 lire	365. 2	98. 371
Do do 2 do	32. 8	8. 835
Wurtburg Rix dollar	359. 7	96. 888
Wirtemberg do	359. 1	96. 727
Zurich do	329. 3	88. 700
Do piece of 20 schillings	57. 6	15. 415
Fanam of Pondicherry	35. 0	9. 428
Do of Bombay	22. 8	6. 141
Rupee of Benares	168. 9	45. 495
Do Calcutta	175. 9	46. 380
Do Bombay or Surat (1818)	164. 7	44. 363
Do Madras (old)	164. 8	44. 390
Do Chanderree	159. 5	42. 963
Do Mysore, or New Holker	163. 1	43. 933
Do Parsia, (1789)	173. 9	46. 841
Do Madras (1818)	165. 0	44. 444
Dutch East India Guilder (1820)	148. 4	38. 973

The numbers in the first column of the above table are taken from the table on coins, in *Kelly's Cambist*, vol. II. page 162; those in the second are formed by multiplying the respective numbers in the first by .26936, the value of one grain of pure silver, according to the standard value of the United States' silver coin

TABLE D.

A TABLE containing the values of moneys of account, of different nations, expressed in hundredths of the United States' silver dollar; with their equivalent weight of pure silver, as valued in the United States' standard coin.

	Weight of pure silver in grains.	Value in cents.
Aix-la-Chapelle Rix dollar courant	224.86	60.567
Alicant Libra or Peso	282.15	76.100
Amsterdam Rix dollar	376.25	101.346
Do Florin (old)	150.38	40.506
Do do (new)	148.38	39.967
Do Pound Flemish	890.29	239.808
Antwerp Pound Flemish of exchange	882.63	237.745
Do Florin of exchange	147.09	39.619
Do Pound Flemish courant	756.60	230.798
Do Florin courant	126.04	33.949
Arragon Libra jaguesa	352.69	95.001
Augsburg Florin giro of exchange	229.16	61.726
Do do courant	180.46	48.609
Barcelona Libra catalan	201.52	54.281
Basil Rix dollar, or Ecu of exchange	338.51	91.182
Do do courant	304.04	81.885
Bergamo Scudo of 7 lire	255.44	68.806
Berlin Pound Banco	338.37	91.143
Do Rix dollar courant	257.81	69.443
Bern Ecu of 3 livres	305.36	82.252
Do Crown of 25 batzen	254.44	68.536
Bologna Lira courant	77.77	20.948
Do do money of exchange	79.63	21.449
Bolsano Florin giro of exchange	238.18	64.156
Do do current	180.46	48.609
Bremen Rix dollar courant	270.70	68.915
Canary Isles Real courant	28.19	7.593
Cassel Rix dollar courant	270.70	68.915
Cologne Rix dollar specie	224.72	60.529
Do do courant	219.14	59.027
Constantinople Piastre, or dollar of 1819	67.67	18.227
Dantzic Guilder or Florin	64.45	17.360
Denmark Rix dollar specie	391.86	105.551
Do do Sundish specie	387.05	102.634
Do do Crown money	346.39	93.302
Do do Danish currency	317.04	85.397
Do do Holstein do	313.52	84.430
England* Pound sterling	1718.71	462.940
Florence Lira	58.15	15.663
Do Ducat, or Crown courant	407.05	109.642
France Livre Tournois	68.60	18.478
Do Franc (new system)	69.46	18.710
Frankfort Rix dollar, convention money	270.70	68.915
Do do Muntze	225.58	60.762
Geneva Lire	115.51	31.114
Do Florin	32.94	8.873
Genoa Lira fuori banco	57.22	15.413
Do Pezza, or Dollar of exchange	328.85	88.577
Do Scudo, or Crown of exchange	266.81	71.868
Do Scudo d'oro marchi	612.22	164.908
Germany Rix dollar courant	270.70	68.915
Do do specie	360.92	97.217
Do Florin of the empire	180.46	48.608
Do do Muntze	150.38	40.506
Hamburg Marc banco (at a medium)	130.47	35.144
Do *Pound Flemish* banco	978.59	263.593
Do Marck courant	106.13	28.587
Do Pound Flemish courant	795.98	214.404
Hanover Rix dollar, in cash	299.78	80.747
Do do in gold value	279.29	75.229
Ireland, Pound Irish	1586.51	427.343
Königsberg Guilder or Florin	85.94	23.149
Leghorn Pezza of 8 reals	331.21	89.216
Do Lira moneta buona	58.22	15.682
Do do lunga	55.79	15.027
Leipsic Rix dollar, convention money	270.70	68.915
Lucca Lira	52.99	14.273
Do Scudo d'oro	397.45	107.056
Do Scudo currente	370.95	99.918
Malta Scudo or crown	152.68	41.126

*Gold being the standard measure in England, the Pound sterling is $4.56.57 in United States' gold or silver—1 to 15.

TABLE D—Continued.

	Weight of pure silver in grains.	Value in cents.
Milan Lira imperiale	74. 55	20. 067
Do Lira currente	53. 35	14. 370
Do Scudo imperiale	436. 12	117. 473
Do Scudo currente	303. 06	81. 632
Modena Lira	26. 64	7. 176
Munich Guilder or Florin	150. 38	40. 506
Nanci Livre (money of Lorraine)	52. 85	14. 236
Naples Ducato di Regno	295. 04	79. 472
Navarre Real	35. 08	9. 449
Do Libra	58. 72	15. 816
Neufchatel Livre tournois	97. 61	26. 292
Do do faible	39. 03	10. 413
Novi Scudo d'oro marche	607. 22	163. 559
Portugal Milrea	412. 90	111. 222
Parma Lira	16. 83	4. 533
Persia Toman of 100 mamoudies	2059. 59	554. 750
Poland Guilder or Florin	43. 18	116. 309
Riga Rix dollar, Alberts	376. 26	101, 349
Do do currencey (agio 40 per. cent.)	268. 76	72. 393
Rome Scudo or crown	372. 75	100. 403
Do Scudo di stampa d'oro	568. 39	153. 102
St. Gall Florin, money of exchange	196. 50	52. 928
Do do courant	163. 09	43. 929
St. Remo Lira	60. 58	16. 318
Sardinia do	130. 41	35. 128
Sicily Ounce	884. 70	238. 302
Do Scudo	351. 05	94. 680
Spain, Real of old plate	34. 95	9. 414
Do Real of new plate	37. 10	9. 993
Do Real of Mexican plate	46. 30	12. 471
Do Real vellon	18. 55	4. 997
Do Dollar of old plate	279. 29	75. 229
Straalsund Rix dollar of account	203. 02	54. 685
Do Pomeranian Guilder	101. 55	27. 354
Strasburg Florin	136. 64	36. 805
Sweden Rix dollar	396. 81	106. 884
Switzerland Franc (new system)	158. 55	42. 708
Trieste Florin, Austrian currency	180. 46	48. 609
Do Lira, Trieste currency	34. 09	9. 182
Do Lira di Piazza	33. 30	8. 970
Turin Lira	80. 78	21. 759
Venice Lira piccola (of the old coin)	36. 31	9. 781
Do do (Austrian)	30. 44	8. 199
Vienna Florin	180. 46	48. 609
Zante Lira	29. 07	7. 830
Zurich Florin, money of exchange	185. 12	49. 864
Do Florin courant	168. 29	45. 331

N. B.—The numbers in the first column of the foregoing table are deducted from the sterling values of moneys of account, as given by *Kelly*, vol. II, page 149; and are found by multiplying said values, in pence, by 7.1613, the grains of pure silver worth one penny sterling. The numbers in the second column are found by multiplying those in the first by .26936, as in Table A.

The British Government, in 1798, appointed a committee to take into consideration the state of its coin: for, among other circumstances, it was discovered that the gold coin had, within certain periods, sustained considerable loss in weight. It therefore became an interesting inquiry whether this loss was occasioned by any defect in the composition or quality of the standard gold, or in the figure or impression of the coins.

Two principal questions were to be decided:—

First. Whether very soft or ductile gold, or gold made as hard as is compatible with the process of coining, suffer most by wear, under the various circumstances of friction to which coin in circulation is subjected.

Second. Whether coins with a flat, smooth, and broad surface, wear

less than those that have certain protuberant parts raised above the general level of the piece.

After a laborious, expensive, and widely diversified course of experiments, in which gold was combined with different quantities of the same, and of different metals as alloy, and the compound subjected to proper trials, the following, among others, were found to be the results:

First. That fine gold, when exposed to friction against gold of equal quality, under the pressure of a considerable weight, suffers a very notable loss; and that, under all circumstances, it is more subject to have any embossment on its surface obliterated, than any variety of alloyed gold; not so much by abrasion, as by the compression of the raised parts, in consequence of its extreme softness and ductility.

Second. That fine gold, when rubbed against the various kinds of that which is alloyed, almost in every case suffers the greatest loss.

Third. That gold reduced to standard, or 22 carats fine, by silver, silver and copper, or copper alone, suffers by friction, under general circumstances, a smaller diminution than fine gold; and with or without abrasion, the protuberant parts on the surface of these pieces, remain more permanent, under all circumstances, than those of the fine gold. The difference of wear between the three kinds of standard gold above mentioned, does not appear considerable; but, upon the whole, the preference is due to gold alloyed with a mixture of silver and copper, or copper alone.

Fourth. That gold made standard partly by iron or tin, sustains a greater loss by friction, than either of the above mentioned standard compounds.

Fifth. That the wear of standard silver, is nearly equal to that of fine gold, but more than that made standard by silver or copper, but less than that which is debased below 18 carats fine, even by copper.

Sixth. That, as gold not inferior to standard, wears, in general, less than silver, so does this last suffer much less than copper.

Seventh. That the metals most subject to wear, are those that produce the greatest diminution in others when rubbed against them.

Eighth. That pieces with embossed surfaces, suffer a greater loss, under all circumstances, than those which are smooth and flat.

The course of experiments we have mentioned, exhibited one very remarkable and important result, viz: that gold alloyed with a $\frac{1}{4}$ of a grain of antimony to the ounce, or $\frac{1}{1920}$ part of the mass, had its ductility so far destroyed, as to be rendered unfit for coinage. And it is well that the copper of commerce frequently contains a much greater proportion of that metal, and consequently is unfit to be used as alloy for gold.

The result stated, though highly important with respect to the fabrication of coins, afford no data to ascertain the absolute loss, in weight, which a given coin suffers from wear, during a given period of its circulation. For this purpose, we must have recourse to actual weighing of coins of

the same date, at protracted intervals of time. Now, admitting as correct the estimates deduced from experiments said to have been made at the U. States' mint, wherein the loss, in fifty years, of the eagle, half eagle, and quarter, is designated by the numbers 1, 2, and 3; and that of the dollar, half dollar, quarter, disme, and half disme, by the numbers 1, 2, $3\frac{1}{2}$, 6, and 10, it follows that the loss of weight in the gold eagle is to that of its value in silver dollars, as 1 to 10; in half dollars, as 1 to 20; in quarters, as 1 to 35; in dismes, as 1 to 60; in half dismes, as 1 to 100. Again, the wear of the half eagle will be to that of its value in dollars, as 1 to 5; in half dollars, as 1 to 10; in quarters, as 2 to 17; in dismes and half dismes, as 1 to 30 and 60, respectively. Lastly, the wear of the quarter eagle, will be to that of its value in the dollar, in subdivisions, as $1\frac{1}{2}$ to $2\frac{1}{2}$, 5, $8\frac{3}{4}$, 15, and 25; or, as 4 to 10, 20, 35, 60, and 100, respectively.

These results are worthy of attention, and consistent with what ought to be expected, from the nature and circumstances of the case; for the smaller coins are always more frequently handled, and, of course, subjected to more attrition; they have also a greater surface, in proportion to their solid content or weight, and, consequently, on both these accounts, will be exposed to a proportionably greater diminution of weight.

On the comparative wear of gold and silver coins.

The density of standard gold, is to that of silver as 18880 to 10534; hence, the surfaces of similar solids and equal weight composed of these metals, will be as $10534\frac{2}{3}$ to $18880\frac{2}{3}$, or 2 to 3 very nearly. If, now, the loss of weight by attrition in gold, be to that in silver, under like circumstances, as m to n, and equal weights of them, as 15 to 1 *in value;* it will follow that the loss, in value, of similar pieces of equal weights, will be in the compound ratio of $2 \times 15 \times m$ to $1 \times 3 \times n$; or, 10 m to n, that is, the loss in value by wear, under like circumstances, in similar pieces of equal weight of standard gold and silver, would be as 10 to 1. But, to have an equal amount of these metals in circulation, there must be 15 pieces of silver for one of gold; therefore, the loss on equal amounts of gold and silver coins of equal weight, would be as 10 m to 15 n, or 2 m to 3 n; that is, as twice the facility of gold to wear, to three times that of silver; and, if the quantities m and n were found by actual experiment, it would be easy to extend these results to all the subdivisions of both gold and silver coins; but, it is not probable that the coins of both metals will ever be exposed to equal wear in the United States.

WASHINGTON, *December* 31, 1829.

SIR: The information which it is in my power to give you respecting the relative value of gold and silver, applies principally to France. It, however, happens, that it is that which affords the best and most easy means to ascertain the fact, as it is by far the most wealthy country in which both gold and silver *coins* circulate simultaneously. There has been no

scientific comparison of the new French and British weights. The most correct is that made in the year 1824 by Dr. Kelly, the result of which is 15,434.1 grains, troy weight, for the kilogramme; but, as it cannot be relied on within 3 or four grains, I have assumed 15,435 grains, which makes the par of exchange between the United States and France 5 francs 34½ centimes for our dollar. The standard of both the gold and silver coins is nine-tenths fine and one-tenth alloy, and the legal relative value of the two species of coins is, since about the year 1790, 15.5 to 1, the kilogramme of standard gold being coined into gold coins of the nominal value of 3,100 francs, and the kilogramme of standard silver into silver coins of the nominal value of 200 francs. It is believed that, notwithstanding the great attention which was at that time paid to the subject, gold was even then rated too low in proportion to silver: it is certain that the fact is so now. During the thirteen last years, there has never been a premium on silver coins, and there has almost always been one on gold coins. This has never, during that period, reached one per cent. which may be considered as the greatest fluctuation in the relative value of gold and silver coins in France. But it is very rarely, and only for very short periods, that this premium on gold coins has ever fallen below one-fifth, or exceeded four-fifths per cent.; and the average is about one-half, rather below than above it. If, therefore, the legal relative value was enhanced one-half per cent. or be about 1 : 15.58, instead of 1 : 15.5, the ordinary fluctuations would not exceed three-tenths per cent. above or below that legal value.

The relative value of gold and silver bullion differs from that of gold and silver coins, and is liable to greater fluctuations. Independent of these, there are two reasons which make gold bullion more valuable, in relation to silver bullion, than gold, in relation to silver coins. It is more expensive to coin ten silver dollars than one gold eagle, which, if the charge for coining is the same for both, makes, in proportion, the silver coin more valuable; and the unavoidable difference between the legal and the actual standard of the most faithful coins, as well as the similar original difference of weight, and the diminution arising from wear, are more sensible and greater in value in gold than in silver coins; so that the loss in melting the current gold coins of any country may be fairly estimated at one-half per cent. Of this the French Government was aware; and accordingly the mint, which coins all the bullion and foreign coins that are brought to it, paying for it as it is brought, deducts a much greater *seigneurage* on silver than on gold; that is to say, 3 francs (or 1½ per cent.) on each kilogramme of standard silver, and 9 francs (or less than three-tenths per cent.) on each kilogramme of standard gold; in other words, the mint price of standard gold and silver per kilogramme, in France, is 3,091 francs for the first, and 197 francs for the last. The relative value of gold to silver bullion is therefore fixed at the rate of 3,091 : 197, nearly equal to 15.69 : 1. Each metal is brought to the mint in greater or less quantities, respectively, according to the fluctuations

in their relative market value. But what proves that this ratio does not essentially differ from the true average market relative value is, that the mint has been abundantly supplied with both for the last 25 years, the coinage of France being far greater than that of any other country. I hardly need observe that this is due to the almost total expulsion of paper as currency. The Bank of France alone issues paper, and none of a denomination less than 500 francs; so that it is used almost exclusively for commercial remittances and transactions, and makes no part of the currency, properly so called, of the country. Paper, as all know, necessarily drives away the precious metals, which will naturally flow to the places where paper is not used. They are a dearer, but the only safe circulating medium; and no country that will resort to other means can expect to have a sound and uniform currency. There is indeed no permanent standard of value in nature; but, as applied to periods of 20 or 30 years, within which time all ordinary contracts are executed, gold and silver are, for that purpose, far preferable to any other commodity; and paper, having no intrinsic value, must, however used as currency, be always estimated in reference to those precious metals.

Although it cannot be expected that an alteration in the erroneous relative legal value of the gold and silver coins of the United States will, whilst paper chiefly of a local circulation continues to be their general currency, be productive of any great advantage, still the change will do some good, and can be attended with no injury. The present rate was the result of information, clearly incorrect, respecting the then relative value of gold and silver in Europe, which was represented as being at the rate of less than 15 to 1, when it was in fact from 15.5 to 15.6 : 1. It would be better, at all events, to discontinue altogether the coining of gold than to continue the present system.

Although the ratio of about 1 : 15.58, as from coin to coin, which is deduced from the average premium on gold coins in France, is most to be relied upon, yet there may be an advantage, and no danger, in fixing the value of gold at a somewhat higher rate: for it appears certain that the average ratio is higher, both in England and in the United States.

I have not sufficient data to estimate that ratio in the first country, but I am inclined to the opinion that, for the last two years, the price of American (United States) silver has not exceeded there the average of 57½ pence sterling per ounce, which gives the ratio of 15.82 : 1. But it must be observed that this is not merely the ratio of bullion to bullion, (which, in France, is 15.69 : 1) but of silver bullion to gold coin. This ratio is, in France, according to the mint price and current value of gold coins; that is to say, with 1½ per cent. premium, at 3,115.5 : 197, or about 15.81 : 1.

With respect to the United States, the average premium on the American gold coins, for the last four and a half years, has been about 5⅛ on the nominal value. This being according to our ratio of 15 : 1,

gives, for the average market price, the apparent ratio of 15.775 : 1 for that of gold bullion to silver coin, since, being so underrated, the American gold coins can be considered only as bullion. But, as they are probably one-half per cent. defective in weight and standard together, the true ratio may rather be estimated at 15.82 : 1, or about the same as that deduced from the price in England of 57½ pence per ounce of dollars for the ratio of silver bullion to gold coin. But less reliance can be placed on the ratio deduced from the price of American gold in the United States than from either of the other two modes. A single glance at the tables of prices current will show that that price is entirely regulated by that of the exchange with London. It will be found, accordingly, that, in the summer of 1825, when the nominal exchange on London was 5 per cent. premium, or, in reality, near 2 per cent. below par, the nominal price of American gold was 2½ per cent. premium, or, in reality, 1½ per cent. below its average market value in Europe or in the United States. This anomaly was clearly due to the legal value being underrated. Generally speaking, the difference between the true rate of exchange on London and the true market price of American gold in the United States, is about 1½ per cent. (as will be seen by the table F, where the true premium on both is calculated according to the ratio of 15.6069 to 1.) This general result, deducted from the New York prices current for the last four and a half years, agrees with the general result of actual sales of our gold in London. The freight, insurance, and all charges, are near 1½ per cent. and the average loss in weight and standard about one half per cent. But, from this loss of 2 per cent. must be deducted, when compared with exchange at 60 days, near ¾ per cent. gained in interest, the sales of gold being realized within fifteen days after arrival. It follows that, if gold coins are raised by law to their true value, they will not be exported so long as the exchange on London is not above 1½ per cent. above the true par, or about 8½ per cent. nominal, as now calculated. Whenever the exchange is above that rate there is no means to prevent the exportation; and as the general tendency of our exchanges with Europe is against us, this affords a reason why, in fixing the relative value of the two metals, gold may be a little overrated beyond the ratio deduced from the average premium on French gold coins in France. But this should be done cautiously, as there is always danger in going beyond what the well ascertained facts will warrant.

No notice has been taken, in what precedes, of the market price of Spanish dollars and doubloons. The first vary in standard; and it is much more simple to draw conclusions from the price of our silver coin abroad, than from the fluctuations in the price of Spanish dollars in the United States. The marc of Castile, of standard Spanish silver, should, according to law, be coined into 8½ dollars, making the legal weight of the dollar 416½ to 417 grains troy weight. The legal standard, at least since the year 1772, is $\frac{65}{72}$ pure and $\frac{7}{72}$ alloy, and the Spanish dollar,

faithfully coined, should, therefore, contain about 376 grains pure silver. The calculation is founded on what has been stated, as an accurate comparison of the Spanish with the modern French weights; by which it appears that the marc of Castile is equal to 229.8 grammes. In fact, the Mexican dollars, which (with the Bolivar) are the best, contain but about 374½ grains, and are worth from ¾ to 1 per cent. above ours. The Spanish proper vary, and the most modern are sometimes worth ½ per cent. less than our dollar. The price of the Mexican is in London ⅜ of a penny sterling more per ounce than ours, and in France 6 centimes per dollar.

It may be proper, as connected with the exportation of our silver coin, to state that the price of American dollars in France, deduced from twenty different shipments, is *fcs.* 5.26065 per dollar. Deducting ½ per cent. according to the mint price, from the par value of the dollar, or 5.345, would give *fcs.* 5.26482. The small difference arises partly from that in weight, principally from a small charge at the mint for refining bullion below the French standard. The freight, insurance, commissions, &c. amount, as on gold, to about ½ per cent. and the total loss to 3.28 per cent. If from this ¾ per cent. is deducted for the gain in interest, the difference is 2½ per cent. Whenever, therefore, the premium on exchange exceeds 2½ per cent. true premium, (equal to 9½ nominal on London) the American silver coins will be exported.

Means have been found very lately, in France, to extract with profit the very small quantity of gold which is always found in silver. The effect has been, within a few months, to raise common silver bullion 1-5 per cent. above the mint price. Dollars and other bullion are purchased at that rate by the melters, who, after having extracted the gold, sell the bullion to the mint at its ordinary price. This circumstance will not ultimately affect the relative value of gold and silver coins, as the process will be gradually applied to all the silver bullion before it is coined; but it is, in the mean while, a reason against overrating gold.

The doubloon ought to be of the same weight and standard as the dollar. But it has been more adulterated, and, taking the ratio of 15.6 : 1, is not believed to be, on an average, intrinsically worth more than dollars, 15.16. The premium, calculated on that basis, varies in the United States from 2½ to 8, and averages 4½ per cent. This affords no criterion whatever of the relative value of the two metals, as it is exclusively due to the varying demand for the Havana and South American market; where, by internal regulations, the doubloon is rated never less than 16 and generally at 17 dollars. This arbitrary order drives, of course, silver from the market, and without raising, actually, gold to that rate, has, nevertheless, a considerable effect on the price of that particular coin. The average premium on Patriot doubloons, which are as good, is but about 2 per cent.

Reverting to the valuations founded on correct data, it has been shown that,

1st. The relative value of gold to silver coins, deduced from the average premium of ½ per cent. on gold coins in France, is *below* 15.6: 1.

2d. The relative value of gold to silver bullion, deduced from the mint price in France, is *below* 15.7: 1.

3d. The relative value of gold coins to silver bullion, deduced from the mint price in France, combined with the average premium of ½ per cent. on gold coins, and, also, from the presumed average of 57½ pence per ounce of American dollars in England, is *above* 15.8: 1.

4th. The premium in the United States on American gold, though much less to be relied on, since it is regulated by the exchange, corroborates the last mentioned ratio.

It is clear that it is the relative value of coins to coins which is the proper foundation. That of bullion to bullion, and that of gold coins to silver bullion are, in fact, the same, allowing for the superior value of coins over bullion; and although, for the object in view, less correct than that of coin to coin, shows, nearly, how far the gold coins may be rated, without danger, above the last mentioned ratio. The conclusion is, that the ratio should not be below 15.58, and not above 15.69: 1; and that we will be safe between those limits.

The ratio is only a basis on which to proceed, and it is quite immaterial whether it gives an apparently inconvenient fraction, since, once adopted, it is never recurred to, either at the mint, or for any calculation of exchange, rate of duties, &c. In selecting, therefore, a ratio between the limits aforesaid, the first object is to take one which will correspond with a convenient number of grains, standard and pure, contained in the ten dollars gold piece. The next, if practicable, is, that this should also give a convenient number for the reduction of pounds sterling into dollars and cents, which must be perpetually recurred to in the calculations of duties and exchange.

The most convenient ratio, in both respects, is that of 2700: 173, equal to about 15.6069: 1; and answers nearly to a premium of ⅜ per cent. on French gold coins; which is above the average. This ratio will give 259½ grains for the weight of the ten dollars gold piece, 237⅞ grains pure gold in it, *drs.* 4.7505 for the value of the pound sterling, and make the present eagle worth $10.40½. The table G shows the results of several other ratios. I think that that which gives 258 grains for the weight of the ten dollars gold coin rates gold too high. The calculations in relation to the pound sterling are, of course, all founded on the fact, that the 20*s.* sterling gold piece contains $113\frac{1}{6\frac{1}{23}}$ grains of pure gold, and the American dollar 371¼ grains of pure silver.

As there is not in nature any permanent standard of value, it has been objected to the simultaneous circulation of the two metals, as a legal tender, that, in addition to the fluctuations in the price of either gold or silver, if only one of the two was made the sole circulating medium, the fluctuations in their relative value increase the uncertainty of the standard.

Great Britain has, since the year 1819, acted on the plan of adopting gold as the sole legal tender for all payments above 40*s.* sterling. But in order to have money for small payments, she resorts to an adulterated silver currency, which is by law rated at about 9 per cent. above its intrinsic value. The object appears to be to prevent the exportation of that silver currency, which is, in fact, assimilated to the copper coinage. It has been a part of the same system to prohibit the issuing of bank notes of £2, and under, the place of which is to be supplied by the over-rated silver new currency.

Great Britain, till the year 1797, when the suspension of cash payments took place, and all other nations, to this day, have used the two metals simultaneously, without any practical injury, and to the great advantage of the community; though, in many instances, sufficient care had not been taken to assimilate the legal to the average market value of the two metals. A fact so notorious, so universal, and so constant, is sufficient to prove that the objection, though the abstract reasoning on which it is founded is correct, can have no weight in practice. It might not, therefore, be necessary to discover in what respect the principle is misapplied; but the reasons appear sufficiently obvious.

The whole amount of the inconvenience arising from the simultaneous use of the two metals, consists in this: Their relative value being fixed by law, if this changes at market, the debtor will pay with the cheapest of the two metals; and, therefore, at a rate less than the standard agreed on at the time of making the contract, if the change in the market price is due to a fall in that of the metal with which he pays his debt. And it is obvious, in the first place, that, if the change is due to the rise in value of one of the two metals, and that had been the only legal tender, the choice given to the debtor to pay with either, enables him to do it according to the standard first agreed on.

But the true answer is, that the fluctuations in the relative value of the gold and silver coins, arising from the demand exceeding or falling short of the supply of either, are less in amount than the fluctuations, either in the value of the precious metals, as compared with that of all other commodities, or in the relative value of bullion to coin, and even than the differences between coins, particularly gold coins issued from the same mint; and, therefore, that those fluctuations in the relative value of the two species of coin, are a quantity which may be neglected; and is, in fact, never taken into consideration at the time of making the contract.

It has been shown that the fluctuations in that relative value may, by affixing a correct legal value to each metal, be reduced to $\frac{3}{10}$ or at most $\frac{1}{2}$ per cent. The relative value of gold bullion to gold coin has, within the last five years, varied $1\frac{2}{5}$ per cent. in England; the price of standard bullion having been, in 1824, as low as 76*s.* 9*d.* and the average value of the bullion was for four years (1822—1825) 77*s.* $7\frac{1}{3}$*d.* or $\frac{1}{3}$ per cent. less than that of the coin. It has already been stated that the

remedy and wear together make a difference of ½ per cent between old and fresh American gold coins; but the differences are sometimes much greater, since even the guinea, of the legal weight of 129⅓ grains, could pass, when weighing only 128 grains, or 1 1/10 per cent. less than the legal weight. And the simultaneous rise and fall of the two metals, in relation to all other commodities, though not susceptible of being precisely valued, does often take place to a greater amount than any of the other fluctuations. It is evident, that, whenever such rise takes place, whether generally or only on the spot, it is an advantage to be able to resort to both instead of one of the metals; and that, if the rise is only on one of the metals, for which there happens to be a greater demand, and that should be the sole legal tender, it will be exported, and diminish in a most inconvenient way the whole amount of specie—a diminution which, in that case, cannot be remedied by resorting to the other metal, which is not a legal tender. That inconvenience is still greater when gold is the metal selected for currency to the exclusion of silver, the annual supply of this last metal being much larger in value than that of gold. That annual supply was estimated with considerable correctness by Humboldt, at thirty-six millions of dollars in silver, and twelve millions in gold, prior to the year 1809. Since that time, on account of the revolutions and internal disturbances in what was formerly Spanish America, the annual supply may be estimated at eighteen millions in silver and nine millions in gold. As order is restored, the usual supplies will again take place. In the mean while, the annual exportation of silver to India and China, from Europe and America, has been lessened from twelve to about six millions of dollars, and this has prevented any sensible alteration in the relative value of the two metals. What proves the great amount of both previously existing is, that the diminution in the general supply has not even affected sensibly the value of the precious metals in relation to other commodities.

But not only has England, by that experiment, in the face of the universal experience of mankind, gratuitously subjected herself to actual inconvenience, for the sake of adhering to an abstract principle; but, in so doing, she has departed much more widely from her own principles, and from those which regulate a sound metallic currency. Whilst pretending to exclude silver, she admits it, and makes it a legal tender for all that multitude of daily purchases and contracts under 40 shillings, at an overrated value. This is, in fact, an issue of adulterated money; which does not regulate itself; which, on account of the profit in the coinage, there is a strong temptation to issue beyond what is actually wanted for the object intended; which, being irredeemable, is therefore liable to fluctuation between its nominal and intrinsic value; and which, by its connexion with the 20*s.* and 40*s.* gold coins, deranges, or may derange, the whole system of British currency.

Even if the precedent were good, it could not be conveniently adopted in the United States. If silver were adopted instead of gold, as the legal

tender, which is, in fact, our present system, gold will be excluded altogether, and the partial advantage gained by the English issue of silver must be given up. To the exclusion of silver there are, on the other hand, great objections. The American dollar, or 371¼ grains of pure silver, is the unit of money and standard of value on which all public and private contracts are founded: the supplies of silver are greater, and it requires a greater premium on the exchanges before it can be exported: payments in silver, suppressing small notes, are, as yet, the only practical remedy against over issues of the worst species of paper currency.

I have the honor to be, respectfully, Sir, your obedient servant,

ALBERT GALLATIN.

To the Hon. S. D. INGHAM,
Secretary of the Treasury.

E.

AVERAGE MONTHLY nominal rate of Exchange and price of Specie at New York, for the year 1825 *to June,* 1829.

	EXCHANGE ON				SPECIE.			
	France.	Amsterdam.	England.		Nom. premium on		Price of	
	Francs per dollar.	Cents per Guilder.	*Dollars per pound sterling.	Nominal Premium.	British Gold.	American Gold.	Spanish Doubloons in dollars.	Patriot Doubloons in dollars.
1825.								
January	5.18	41½	4.88.8	10	9½	4½	15.95	.....
February	5.15	41¼	4.86.5	9½	8½	4½	15.95	.....
March	5.15	41	4.84.4	9	8½	4½	15.85	.....
April	5.12½	40¾	4.82.2	8½	8	4	16.15	.....
May	5.23⅛	40¼	4.71.1	6	6	3½	16.	.....
June	5.26	40	4.67.7	5¼	5	2¾	16.	.....
July	5.29	40	4.66.6	5	5	2½	15.70	.....
August	5.31½	40	4.73.3	6½	5	2	15.65	.....
September	5.12½	40¼	4.85.5	9¼	8	4¼	15.65	.....
October	5.12½	41	4.85.5	9¼	8	4¼	15.80	.....
November	5.21	41	4.84.4	9	8	4½	15.85	.....
December	5.34	40	4.84.4	9	8	4½	15.75	.....
Average of 1825				8				
1826.								
January	5.37	40	4.86.0	8	7½	4	15.60	.....
February	5.37	40	4.81.1	8¼	7½	4	15.75	.....
March	5.34	39½	4.80.0	8	7½	4	15.85	.....
April	5.37	39½	4.84.4	9	8½	4½	15.55	.....
May	5.37	40	4.84.4	9	9	4½	15.75	.....
June	5.37	40	4.85.5	9¼	9	4½	15.70	.....
July	5.32	40	4.88.8	10	10	4½	15.80	.....
August	5.23½	40	4.92.2	10¾	10	4½	15.80	.....
September	5.26	40	5.00.0	12½	11½	5¼	15.70	.....
October	5.26	40½	4.96.6	11¼	11½	6¼	15.60	.....
November	5.23½	40½	4.96.6	11¼	11	6	15.60	.....
December	5.23½	40½	4.96.6	11¼	11½	6¼	15.65	.....
Average of 1826				10				

*Calculated on nominal value of pound sterling, at 4s. 6d. per dollar.

TABLE E—Continued.

	EXCHANGE ON				SPECIE.			
	France.	Amsterdam.	England.		Nom. premium on		Price of	
	Francs per dollar.	Cents per Guildet.	*Dollars per pound Sterling.	Nominal Premium.	British Gold.	American Gold.	Spanish Doubloons in dollars.	Patriot Doubloons in dollars.
1827.								
January	5.26	41	4.94.4	11¼	11	6¼	15.65	.....
February	5.28	40⅞	4.88.8	10	10	6	15.80	.....
March	5.23⅜	40½	4.90.0	10½	10	6	15.95	.....
April	5.15⅝	40¼	4.90.0	10½	10	5¼	16.	.....
May	5.15⅝	40⅜	4.92.2	10⅝	10½	6	16.40	.....
June	5.15⅝	40⅜	4.90.0	10½	10	6	16.30	.....
July	5.15⅝	40½	4.86.6	9⅛	9	5¼	16.40	.....
August	5.15⅝	40¾	4.90.0	10¼	9	5⅛	15.90	.....
September	5.15⅝	41	4.93.3	11	10	6¼	15.60	.....
October	5.12⅜	41¼	4.93.3	11	10	6¼	15.70	.....
November	5.12⅝	41⅛	4.94.4	11¼	10½	6¼	15.80	.....
December	5.12¼	41	4.94.4	11¼	10¼	6¼	16.20	.....
Average of 1827				10 7/12				
1828.								
January	5.18⅛	41⅛	4.91.1	10⅛	9⅛	5⅛	16.28	15.78
February	5.18	41⅛	4.91.1	10⅛	9⅛	5¼	16.39	15.73
March	5.13	41½	4.92.8	10⅜	9⅛	6¼	16.22	15.43
April	5.11	41⅝	4.92.8	10⅜	9⅜	6⅜	15.78	15.40
May	5.13	41	4.91.7	10⅜	9¼	6⅜	15.93	15.44
June	5.12	41¼	4.92.8	10⅜	9¼	6	15.99	15.57
July	5.15¼	41	4.88.3	9⅞	9¼	5⅝	15.61	15.58
August	5.18¾	40⅜	4.87.8	9⅜	8⅞	5¼	15.58	15.32
September	5.13¾	40⅜	4.91.7	10⅛	9⅛	5⅛	15.70	15.34
October	5.11¼	40⅞	4.92.2	10⅜	9⅜	5⅝	15.76	15.38
November	5.14	40⅝	4.90.	10¼	9⅛	5¼	15.78	15.39
December	5.20	40¼	4.86.7	9¼	8⅛	5¼	15.78	15.40
Average of 1828				10 5/12				
1829.								
January	5.26	40⅜	4.79.4	7⅛	8¼	5¼	16.10	15.42
February	5.21	40⅛	4.82.8	8⅛	8⅛	5¼	16.31	15.40
March	5.19¼	40¼	4.81.7	8⅛	8⅛	5¼	16.	15.33
April	5.18⅛	40⅛	4.83.3	8⅜	8¼	5⅛	15.79	15.
May	5.17¼	40⅜	4.87.2	9⅛	8⅛	5⅛	15.80	15.
June	5.24½	40¼	4.83.3	8⅜	8¼	5	15.54	15.
Average of six months of 1829				8¼				

* Calculated on nominal value of pound sterling, at 4s. 6d. per dollar.

F.

A TABLE showing the actual premium or discount on Exchange and Specie at New York, from the 1st of January, 1825, to 30th June, 1829, calculated on the supposition that the relative value of Gold and silver coins is at 15.6069 to 1, which makes the pound sterling = 475, and the weight of ten dollars Gold coins 259½, grains, being an increase on the present legal value (U. S.) of Gold of about 4.05 per cent.

PAR.	France, 5.345 per dollar.	Amsterdam, 40 per Guilder.	England, 4.75 per pound sterling.	British Gold at 4.7505 per pound sterling.	American Gold at 10.40½ per present eagle.	Spanish Doubloons at 15.16 dollars.
1825.						
January	+3	+3⅜	+2.9	+2.2	+0.4	+5.1
February	+3½	+3½	+1.5	+1.5	+0.2	5.1
March	+3⅜	+2⅜	+1.5	+1.5	+0.2	4.5
April	+¼	+1⅜	+1.	+1.	par	6.5
May	+2	+ ⅜	−0.8	−0.8	−0.5	5.5
June	+1½	par	−1.5	−1.8	−1.2	5.5
July	+1	par	−1.8	−1.8	−1.5	3.5
August	+ ⅛	par	−1.4	−1.8	−2.0	3.1
September	+¼	+1⅞	+2.2	+1.	+0.7	3.1
October	+¼	+2⅛	+2.2	+1.	+0.7	4.1
November	+2⅛	+2⅛	+2.	+1.	+0.4	4.5
December	par	par	+2	+1.	+0.4	3.8
Av. of 1825	+2.5	+2.3	+1.	+0.4	−0.2	+4.5
1826.						
January	− ⅛	par	+1.	+0.3	par	+2.8
February	− ⅛	par	+1.3	+0.6	par	3.8
March	par	−1⅛	+1.	+0.6	par	4.5
April	− ⅛	− ⅛	+2.	+1.5	+0.4	2.5
May	− ⅛	par	+2.	+2.	+0.4	3.8
June	− ⅛	par	+2.2	+2.	+0.4	3.5
July	+ ⅛	par	+2.9	+2.9	+0.4	4.1
August	+2	par	+3.6	+2.9	+0.4	4.1
September	+1½	par	+5.3	+4.1	+1.6	3.5
October	+1⅛	+1⅛	+4.5	+4.1	+2.1	2.8
November	+2	+ ⅛	+4.5	+3.8	+1.9	2.8
December	+2	+1⅛	+4.5	+4.1	+2.1	3.1
Av. of 1826	+0.6	+0.1	+2.9	+2.4	+0.8	+3.3
1827.						
January	1⅛	+2⅛	+4.1	+3.8	+2.6	+3.1
February	1	1⅞	2.9	2.9	1.9	4.1
March	2	1⅛	3.2	2.9	1.9	5.1
April	3⅛	1⅜	3.2	2.9	1.2	5.5
May	3⅜	1⅜	3.6	3.2	1.9	8.1
June	3⅜	1⅛	3.2	2.9	1.9	7.5
July	3⅛	⅜	2.4	2.	1.2	8.1
August	3⅛	1⅞	3.2	2.	1.4	4.8
September	3⅛	2⅛	3.8	2.9	2.4	2.8
October	4	3⅛	3.8	2.9	2.1	3.5
November	4	3⅛	4.1	3.2	2.6	4.1
December	4	2⅜	4.1	3.2	2.6	6.8
Av. of 1827	+3.3	+2	+3.5	+2.9	+2.	5.3
1828.						
January	+3	+3⅛	+3.4	+2.4	+1.6	7.4
February	3	3⅛	3.4	2.1	1.6	8.
March	4	3⅛	3.7	2.4	2.1	6.9
April	4⅛	3⅛	3.7	2.7	2.2	4.
May	4	2⅛	3.5	2.5	2.	3.
June	4	2⅛	3.7	2.7	1.9	5.4
July	3⅛	2⅛	2.8	2.3	1.5	2.9
August	3	1⅛	2.7	1.4	1.2	2.7
September	3⅛	1⅛	3.5	2.6	1.4	3.5
October	4⅛	2⅛	3.6	2.7	1.5	3.8
November	3⅛	1⅛	3.2	2.6	1.6	4.
December	3	⅛	2.5	1.6	1.6	4.
Av. of 1828	+3.6	+2.4	+3.3	+2.3	+1.7	+4.6

TABLE F—Continued.

PAR.	France, 5.345 per dollar.	Amsterdam, 40 per Guilder.	England, 4.75 per pound sterling.	British Gold at 4.7505 per pound sterling.	American Gold at 10.40¼ per present eagle.	Spanish Doubloons at 15.16 dollars.
1829.						
January	+1¼	+1	+0·9	1.3	1.6	6.1
February	2¾	+2	1.6	1.5	1.6	7.6
March	3	1¾	1.4	1.5	1.6	5.5
April	3	1¼	1.7	1.3	1.5	4.1
May	3¼	1¼	1.6	1.6	1.4	4.1
June	2	¾	1.3	1.3	0.9	2.5
Av. of 6 mo	2.3	1.4	1.7	1.4	1.4	1.5

G.

A TABLE showing the number of Grains in Standard and Pure Gold in a Ten Dollars coin, and the par value of the Pound Sterling in money of the United States, according to the relative value of Gold and Silver coins, which may be adopted.

	Silver, being the unit ratio of Gold to Silver: 1	Grains of Gold in Ten Dollars Gold Coins.		Value of the present Eagle.*	Value of the Pound sterling in Dollars.†
		Standard.	Pure.		
United States coins, legal	15.	270.	247.50	10.	4.5657
France..... do. do.	15.5	261 8/31	239 1/31	10. 33 1/3	4.7179
Premium on Gold coins in France, $\frac{1}{10}$ per cent	15.5470	260.50	238 1/2	10. 36 1/3	4.7322
Premium on Gold coins in France, nearly $\frac{1}{4}$	15.5769	260.	238 1/4	10. 38 1/2	4.7413
Premium on Gold coins in France, nearly $\frac{1}{2}$	15.6069	259.50	237 7/8	10. 40 1/2	4.7505
Premium on Gold coins in France, nearly 1 15.65 1/3	15.6371	259.	237 1/2	10. 42 1/2	4.7597
	15.6572	258 3/4	237 1/8	10. 44	4.7657
France Mint price on bullion	15.6904	258.12	236.61	10. 46	4.7759
	15.6977	258.	236.50	10. 46 1/2	4.7781
Aver. ratio Silver bullion to Gold coin	15.8080	256.20	234.85	10. 54	4.8116
Lowest price of Dollars in England, or 57 1/4 pence per ounce	15.8917	254.85	233.61.	10. 59 1/2	4.8371
	16.	253. 6 1/8	232. 03 1/8	10. 66 2/3	4.8700 13/15

* This column shows at once how much per cent. any ratio in the first column will enhance the legal value of Gold.

† $113\frac{1}{371}$ (grains part gold in 20*s.* sterling gold piece) multiplied by the ratio adopted, and divided by $371\frac{1}{4}$, (grains pure silver in dollar) gives the amount in dollars of the pound sterling corresponding with such ratio.

CIRCULAR.

TREASURY DEPARTMENT,
21*st July*, 1829.

SIR: Being charged by a resolution of the Senate with an inquiry as to the true relative value of gold and silver, I request the favor of you to communicate to this Department, so far as it may be conveniently within your power, answers to the following queries, viz:

1st. What is the standard weight (Troy) and fineness of the current gold and silver coins of the principal commercial nations of Europe?

2nd. What is the market value of the above mentioned coins, of standard weight and fineness, in the principal commercial cities of the United States, expressed in the established unit, viz: the dollar and its parts, estimated in the coin of the United States; and what has been the market value, as above, of these coins, at their current weight?

3d. What is the average difference between the standard and current weight of the respective foreign gold coins, usually found in the money market of the United States; also, what is the difference, if any, between their actual and standard fineness?

4th. What have been the rates of exchange between the United States and the principal commercial nations of Europe, the value of bills in the United States being estimated in the money of the United States, as above?

5th. What has been the difference, if any, between the market value of the legal coins of those nations and their "current medium," in which mercantile and exchange accounts were reported?

6th. What is the entire expense of transporting gold and silver coins from the United States to the principal commercial nations of Europe respectively; also, that of gold and silver bullion?

7th. What premium has been given for the United States' gold coin, and for silver coins, at the same point of time, estimated in the same bank paper, during the suspension of specie payments by the banks in the United States?

8th. What premiums, if any, have been given, before or since the specie suspension, for either gold or silver coins of the United States?

9th. Are the gold coins of the United States regularly or casually bought for exportation; if so, in what country are they chiefly melted or recoined?

10th. The same as to silver coin?

11th. What premium was given in England for standard gold or silver, in bank paper, during the suspension of specie payments or since?

12th. Are there any known causes, founded in the supply or demand for gold or silver, calculated to change their relative value; if so, do these causes operate progressively, or do they fluctuate?

It is desirable that the answers to the foregoing queries should com-

prehend as great an extent of time, and embrace as many points of time, as your information and convenience will admit; that the corresponding time of each fact should be distinctly noticed; and when the information is derived from authority, that it be referred to. An answer to either of these questions will be thankfully received.

I am, very respectfully, your obedient servant,

S. D. INGHAM,
Secretary of the Treasury.

MINT OF THE UNITED STATES,
Philadelphia, Sept. 30, 1829.

SIR: I have now the satisfaction of replying to the several inquiries embraced in your letters of the 2d and 6th instant, and your circular of the 21st of July.

For the determination of the weight and fineness of the gold coins of Great Britain, and the gold and silver coins of France, requested in your letter of the 2d, I was only fortunate enough to obtain, after much inquiry, a few sovereigns and 5 franc pieces of this year, and one specimen of the 40 franc gold pieces of 1828, all apparently perfect however, exhibiting, even under a strong magnifier, no mark of attrition. They were all weighed and assayed with the utmost attention to accuracy. The *sovereigns* were found to weigh precisely 5 dwts. 3 grains, and, on being assayed, proved to be of the standard fineness of 22 carats. The value of each sovereign of standard fineness, and weighing as above, will be 455.5. The full weight of the sovereign, by mint regulations, is 5 dwts. $3\frac{27}{100}$ grains; and its intrinsic value estimated in our coins at $4 56.6. The 40 franc piece of France weighed 8 dwts. 7 grains, and was found to be of the fineness of $21\frac{1}{2}$ carats, equal, in the French expression, to $\frac{896}{1000}$. The value of the 40 franc piece deduced from this specimen, would be $7 20.5. By mint regulations, it should contain 8 dwts. $7\frac{15}{100}$ of the fineness of $\frac{900}{1000}$, the value corresponding to which is $7 24.2. A 40 franc Napoleon of 1810, unaltered by use, was weighed and assayed with the same result in every respect.

The 5 franc pieces of 1829, though differing in weight to the extent of 4 grains, weighed, on an average, 16 dwts. 1 grain, and, on assaying, proved to be of the fineness of 10 oz. 16 dwts. 7 grains fine in the pound, equivalent to the French expression $\frac{900}{1000}$. This gives for the value of each piece $93\frac{4}{10}$ cents. The 5 franc piece, by mint regulations, should weigh 16 dwts. $1\frac{85}{100}$ grains, which, at the standard fineness of $\frac{900}{1000}$ gives for the value of the 5 franc piece $93\frac{54}{100}$ cents.

For the purpose of accomplishing the objects specified in your letter of the 6th, and some of the inquiries in your circular, the accompanying table has been formed of the rates of exchange of Philadelphia, on London, Paris, and Amsterdam, through a series of years, commencing in 1788, before the effects of those events were developed, which, in a few years after that period, disturbed the ordinary arrangements of com-

mercial intercourse. In commencing the search for data to complete this series, I entertained the hope of being much more successful than I have been; but I fear to render what has been done useless for your purpose, by longer delay, in attempting to perfect it. Incomplete as it is, it presents, during some parts of the period it embraces, a train of facts not uninteresting. In no instance has a conjectural quotation of exchange been inserted, however probable it might be that the rate continued the same. When the sign of repetition appears in the column, it represents an actual quotation in the price current or record made use of.

In giving the exchanges, I have, for more ready comparison, reduced those on Paris and Amsterdam to their rate above or below par, as those on London are now given.

In reducing the quotations on Amsterdam, the guilder has been estimated at 40 cents, the usual estimate, which is very nearly true; strictly, the guilder is worth, comparing silver with silver, $39\frac{27}{100}$. This coin is of the same value now as at the commencement of the series.

The par on Paris has been assumed at 5 francs 26 centimes per dollar, and the quotation reduced accordingly. This par is, however, stated by some very respectable authorities at 5 francs 25 centimes per dollar, founded on the erroneous, as I contend, report of the French assays, by which our silver coins are rated at about the fourth of one per cent. below their standard. Previously to the present French system, the quotations were founded on the livre, the relation of which to the franc is well known, and has been regarded in the reductions of that date.

The earlier exchanges on London are reduced according to the old proportion of $166\frac{2}{3}$, Pennsylvania currency, for £1 sterling. In later years, the quotations are given in our prices current at so much above or below par, having in view the par of $4 44 assumed in our revenue laws, which, when thus assumed, was, no doubt, considered equivalent to the proportion above mentioned.

The near equality of the rates of exchange on London, Paris, and Amsterdam, in 1788, 1789, indicates that the old estimate of the par on London, which was very nearly true during the currency of the pillar dollar, had not, at those periods, been discovered to be erroneous, though this was the fact after the Spanish dollar of 1772 and onwards had become general in circulation, and considered still to represent 4*s.* 6*d.* sterling. The remarkable want of accordance exhibited in recent years, between our exchanges on London and those on Paris and Amsterdam, strongly intimates that the nominal par on which the former is quoted is now far from being conformable to the existing monetary systems of the United States and England.

The exchanges on London, Paris, and Amsterdam, given for the years 1826, '27, '28, '29, are worthy of special notice; they are actual transactions of the same institution, the United States' Bank.

I find no trace of a premium on gold, in this city, before 1821, for the purpose of export and remittance, in preference to bills of exchange. A small premium of perhaps ½ per cent. was, in previous years, occasionally given for gold, to be used in the arts, or as a medium of easier transportation than silver. The state of exchange in May of that year would now bring gold into demand at a premium of 4 per cent.; but it is probable that, for a few months after the first experiments of remitting gold, it might have been obtained without a premium. In the year 1820, more than $1,300,000, in gold, were coined at the mint, and it would not bear a premium that would attract notice, until it had become scarce.*

I have carefully taken the average of the rates on London and Paris, together with the price of silver in London, and premium on gold here, for the years 1823, '24, '25, in order to place them in opposition with the exchange between London and Paris, given for those years by Mr. Tooke, in his "Considerations on the Currency." These comparisons will, it is presumed, bear on the general subject of your investigations. This writer states the par between London and Paris at 25 francs 15 centimes for the pound sterling. This is deduced, I presume, from a comparison of the market price of silver in the two countries. The price of standard silver in London, for those years, averaged almost precisely 5 shillings per ounce, equal to 5*s.* 4¾*d.* for fine silver, which, compared with the price of fine silver in Paris, by mint regulations, gives for the par, during those three years, 25 francs 23 centimes, differing only the third of one per cent. from the ratio assumed by him as the ordinary par.

It is worthy of notice, that the par between London and Paris, deduced from the par of 5 26½ between the United States and Paris, compared with the actual par in silver between the United States and London, results in the above ratio of 25 francs 23 centimes for £1 sterling.

Average of three years, 1823, 1824, *and* 1825.

London on Paris, 25 francs 40 centimes for sight bills, which is equal to 1 per cent. below par, say for 60 day bills ...	½ below par.
Philadelphia on Paris, 60 day bills, 5 francs 26¾ centimes.	par.
Philadelphia on London, 60 day bills	8½ premium.
Standard silver, per ounce, in London, 5 shillings	
Premium on gold in Philadelphia	2¾ premium.

Another series of rates of exchange is subjoined, embracing, for the years 1827 and '28, the exchange of Philadelphia on London, Amsterdam, and Paris, from actual sales by the United States' Bank.

*The effect of the suspension of specie payments by the Bank of England on the paper currency, is given at so much per cent. below the par of £3 17*s.* 10½*d.* per ounce, for gold, calculated from the quotations of the price of gold, given in Marchett's tables, from 1815 to 1825, inclusive, from which, also, are chiefly taken the quotations of the price of silver per ounce. It would seem from these, that, until 1800, the paper currency of England had been sustained by public feeling, though specie payments were suspended in 1797.

Average of two years, 1827 and 1828.

Philadelphia on London, 60 days	$10\frac{3}{8}$ premium.
Philadelphia on Paris, do	$1\frac{5}{8}$ premium.
Philadelphia on Amsterdam do	$1\frac{26}{100}$ premium.
Price of standard silver in London	5 shillings.
Premium on gold in Philadelphia	$5\frac{5}{8}$ premium.

Specie payments were suspended in Philadelphia the 30th August, 1814, but, from the silence of the prices current, it is to be inferred that a general good feeling prevented the effects of this measure from becoming sensible, in the form of a premium on specie, until the Spring of 1815. The first notice of a premium that I have discovered, is in May, 1815.

Specie payments were resumed by the Philadelphia banks February 20, 1817. During all the period of suspension, gold and silver appear to have been equally appreciated.

The inquiries contained in your circular will now be reviewed in their order.

Question 1. The standard weight and fineness of the gold and silver coins of Great Britain, France, Holland, Spain, and Portugal, will embrace, it is presumed, all that it will be important to notice.

Great Britain.

The sovereign, or pound sterling, in gold, is of the standard weight of 5 dwts. $3\frac{27}{100}$ grains, and of the fineness of 22 carats. The silver coins of Great Britain are of the standard fineness of 11 oz. 2 dwts. fine in 12 ounces, and of the standard weight of 3 dwts. $15\frac{3}{11}$ grains for the shilling piece. The market value of the sovereign of full weight, when exchange on London is $9\frac{1}{2}$ to 10, is 475 to 480 by tale. The sovereign is considered to be of full weight when it weighs 5 dwts. $2\frac{3}{4}$ grains; when below this, it is called light, and is sold by weight at the same premium as our gold coins. But few of them are light.

The silver coins of Great Britain are rarely seen in the Atlantic cities of the United States. The value of the shilling piece, when of standard weight and fineness, is $21\frac{74}{100}$ cents, the multiples in proportion.

France.

The standard fineness of the gold coins of France is 9 parts fine and 1 part alloy. The standard weight of the 40 franc piece is 8 dwts. $7\frac{15}{100}$ grains; the value, when of full weight and fineness, has been before stated. These coins, whether of full or of light weight, are not sold by tale, but at a premium by weight, variable with the demand for gold, and nearly the same as that on our gold coins; the latter are, however, preferred, as being of a familiar standard. The fineness, weight, and value of the 5 franc pieces, have been before stated.

HOLLAND.

The ten guilder piece of the improved coinage of 1816 must be of the standard fineness of $\frac{900}{1000}$, and weigh $103\frac{85}{100}$ grains Troy; its value, when of full weight and fineness, is $3\frac{77}{100}$, on which value it bears a premium in the market with other gold coins; it is not sold by tale, and is not frequently found in the United States.

The silver guilder must be of the fineness of $\frac{893}{1000}$, and be of the weight of $166\frac{17}{100}$ Troy grains; its value is $39\frac{97}{100}$; it is rarely seen in the United States.

SPAIN.

The standard fineness of the gold coins of Spain is 21 carats; their actual fineness is a little variable, but, on an average, about 20 carats $3\frac{7}{16}$ grains. The doubloon is the most important of these coins; by mint regulations, it should weigh 17 dwts. 10 grains; their value, if of the weight and fineness above stated, would be $14 68; they rarely, however, exceed the weight of 17 dwts. 9 grains, and, on an average, may be stated at 17 dwts. 8 grains; they are sold only by tale, being in constant demand for export to the West Indies, especially to Cuba, and varying in price from 15 to 16 dollars; their ordinary real value, estimated in our gold coins, is $14 62.

The standard fineness of the silver coins of Spain is generally stated at 10 oz. 15 dwts. fine in 12 ounces; they incline to exceed, rather than fall below this. By mint regulations, $8\frac{1}{2}$ dollars are to be coined from a marc of silver; assuming for the marc the weight of 3553 grains, which is exceedingly near the truth, the standard weight of the Spanish dollar will be 17 dwts. 10 grains. These coins are not, however, made of this weight. When new, they weigh, on an average, 17 dwts. 8+ grains; taken promiscuously, as found in circulation at this time, they will average 17 dwts. 7 grains, the value corresponding to which is 100 cents 3 mills.

PORTUGAL.

The standard fineness of the gold coins of Portugal is 22 carats; they do not, however, as repeated assays prove, adhere strictly to that standard; the deviation from it is from a quarter to half a carat grain. The standard weight of these coins is 9 dwts. $5\frac{1}{8}$ grains for the half Johannes, the value of which, of standard fineness, would be $8 $18\frac{3}{4}$. The average value of a considerable number, which were the subject of examination in 1826, was found to be $8 18; they are sold only by weight, and bear a premium on their intrinsic value nearly equal to that on the gold coins of the United States.

Of the silver coins of Portugal, none are found in our currency.

The above remarks embrace what I have to offer on the 1st, 2d, and 3d queries. The scope of the 4th has been embraced in the quotations of exchange exhibited in the table. The 5th will, no doubt, be replied

to from some source possessing means of information not within my reach. The table, however, will satisfy this inquiry in relation to Great Britain.

6th. The entire expense of transporting gold and silver coins to London or Paris may be stated at 2½ to 3 per cent. That on gold may be slightly less than that on silver, insomuch as the forwarding from Havre or Liverpool would be somewhat more expensive in the case of silver. This statement is founded on actual operations of the United States' Bank. Among the items of charge, I observe, is one of one per cent. commission, which probably many shippers, by the aid of partners abroad, or some accommodating arrangement of mutual favors, find means to avoid, and thus reduce the charge to about 2 per cent.

7 & 8. These are embraced in the tabular details.

9 & 10. The gold par with London is $4 56.6 for the pound sterling, which is 2¾ per cent. above the par of $4 44, on which exchanges on Europe are now computed. Until exchange advances nominally to 2¾ premium, it is actually below the par of gold, which would, in that case, rather incline to come into the country than to go out. When exchange is nominally at 2¾ premium, if gold could be transported without expense, a remittance in our gold coins, or by a bill, would be equal; but the exchange must advance so much more as to cover the entire expense of transportation, before gold will be shipped in preference to bills, even if it could be obtained without a premium. When the exchange advances to 6 per cent. gold will be shipped regularly, and will begin to bear a premium, as there will at all times be some shippers who possess facilities for its transportation, which reduce the charges on the operation. With exchange at 7 advance, as usually computed, gold would be worth a premium of 1 per cent. to shippers, if ordinary facilities and the premium will advance thereafter with the advance of exchange.

It is known that our gold coins occasionally are taken directly from the Mint to the Liverpool packets. On examining, however, the exports of gold and silver for 1828, as stated in the annual report on the commerce of the United States, I was surprised to find only 12,000 dollars in gold exported to England. The export to the British American colonies of about 51,000 dollars, consisted, probably, of our coins; the large shipments to Cuba were principally, I presume, of doubloons. I am unable, however, to add anything useful to the information contained in those statements of the distribution of specie and bullion exported.

11. This has been embraced in the table.

12. Before the discovery of America, the proportional value of gold and silver was as 10 to 1, and the amount in weight of gold produced in Europe was to that of silver about as 1 to 40. I follow, on this subject, the statements of Humboldt, in his work on New Spain, who appears to have investigated the subject with much care. The production of gold from America, up to the year 1525, was much above the proportion first stated. From this period to the discovery of the gold mines of

Brazil, near the end of the 17th century, the quantity of silver exceeded in weight that of gold, in the proportion of 60 or 65 to 1. In the first part of the 18th century, a remarkable change occurred. The silver produce had but little increased, but that of gold was so much extended by the productiveness of the Brazil mines, that the proportion of silver to gold, received annually from America, was reduced in weight to 30 for 1; but in the last part of this century, the mines of Mexico produced, annually, fourfold the quantity derived from them at its commencement; so that from 1750 to 1800, the quantity of silver imported from America into Europe has been to that of gold as 40 to 1, the increase of silver from Mexico having more than counterbalanced that of gold from Brazil.

It is to be remarked, that, in order to sustain the production of gold in the above ratio to that of silver, it has been found necessary, progressively, to strengthen the inducement for its production by increasing its value relatively to silver, so that it has advanced, since the discovery of America, from 10 for 1, to 15, and even 16 for 1.

New mines of gold or silver, it is conceivable, may again, as heretofore, be developed, of such productiveness as suddenly to derange the existing proportions; and, in this view of the subject, the proportional value of these metals is liable to great fluctuation. But such contingencies apart, it results from past experience, and is conformable to analogy, that the proportional value of gold to silver must still be progressively increased, from time to time, in order to elicit from the mines the relative proportional production in weight of gold to silver, or countervail the diminution of it.

It may be added, that, if any highly commercial nation, not now employing gold in preference to silver for the purposes of currency, should decide on giving to it this preference, the effect of a new demand operating on a supply not now well sustained, must sensibly increase this tendency to an advance in the proportional value of gold. The measure of this effect would depend on the quantity of gold required for the

* What the requisite proportion of weight may be to sustain a given proportion in value of gold to silver, is a difficult problem. The proportion of nations that shall decide on making gold an essential element in their currency, must very much control it. The great disproportion in the quantity of gold and silver existing in nature, is strongly indicated by the fact, that a price per pound fifteen times as high, and operating for such a series of years as must have tested its effect, has not commanded an average annual supply of gold, in proportion to silver, higher than 1 to 40 or 50.

In a well written article in the Encyclopedia Britannica, under the head of ores, the annual production in weight of gold and silver, derived from the mines of Europe and America, from 1790 to 1802, is stated to be, gold 17,800 kilogrammes, (say 48,000 lbs. Troy) and of silver, 947,500 kilogrammes, (say 2,550,000 lbs.) making the proportion about 1 to 53; the amount of the gold, estimated at our standard, which will be near the truth, would be, in round numbers, $10,000,000; and that of the silver, estimated in like manner, which is probably too low, would be, in round numbers, $35,500,000. During a great part of the interval, from that to the present time, the annual production has been much diminished, but the proportions, perhaps, have little varied.

circulation of such nation, and the relation of gold to silver, adopted in order to secure the object in view.

In compliance with the request subjoined to your circular, respecting the fineness and weight of the Mexican dollars, I have to observe, that the Mexican, Central American, and Peruvian dollars, weigh 17 dwts. 8 grs. The Mexican has often been found to exceed this weight by half a grain on an average of large deposites, and the Central American has generally exceeded it by a quarter of a grain. Our latest trials, however, indicate a disposition to issue these coins at a fraction less weight; but the deviation is not clearly ascertained, if indeed it be more than casual. All these coins, as well as the *Chilian dollar*, are of the Spanish standard. The Chilian has, however, been generally found deficient in weight, the average not exceeding 17 dwts. 7 grs. The *Columbian dollar* is an anomaly: its fineness is only 9 fine in 12, and its weight 15 dwts. to 15 dwts. 11 grs., and its average value 70 to 75 cents.

The *Mexican dollar* has, from its fuller weight, been more in demand than other varieties of the Spanish dollar for shipment, as a remittance, when exchange is high, its average value, when of recent emission, being about the half of one per cent. above that of our dollar. When exchange on London is at 8 per cent. advance, as usually computed, that being very nearly the par with London, comparing actual value of silver with silver under the present English system, our silver coins would be exported if the operation involved no expense; they will not in fact, however, be exported until exchange has advanced about 3 per cent. higher; and, even in that case, Mexican and Spanish dollars will be preferred, if obtainable without a premium, being a little superior in value to our coins. When exchange is at 11½ to 12, and Mexican and Spanish dollars at a premium, our silver coins are exported with some advantage, in preference to bills at that rate.

Of the value of different coins in Cuba, or South America, &c. I have been unable to acquire any information to be relied on, except as to the doubloons, which has already been noticed.

Very respectfully, Sir, your obedient servant,

SAM'L MOORE.

Honorable SAMUEL D. INGHAM,
Secretary of the Treasury.

TABLE H.

RATES of EXCHANGE at Philadelphia, on London, Paris, and Amsterdam, with the paper medium of England valued in gold, the London prices of gold and silver, and the Philadelphia premium on gold valued in silver.

	Exchange on			Paper medium of England, valued in gold.	London price of gold, per ounce.	London price of silver, per ounce.	Paper medium of Philadelphia, valued in specie.	Philadelphia premium on gold, valued in silver.
	London.	Paris.	Amsterdam.					
					l. s. d.	*l. s. d.*		
1788	3½ prem	3 prem	2⅝ prem					
1789	3½	3	2⅝					
1790	2 disct	1⅝	2⅜					
1791	2 prem	10 disct	2¼					
1792	2 disct	22						
1793	4							
1794	4½ prem		5					
1795	2		2¼					
1796	5½ disct							
1797	2		Par					
1798	5½		5 disct					
1799	7⅛		7⅛					
1800				Par	3 17 10½			
1801				8½ disct	4 5 0			
1802	1 prem		2½ prem	8½	4 4 0			
1803	2		2¼	2¼	4 0 0			
1804	7 disct		Par	2¼	4 0 0			
1805				do	4 0 0			
1806				do	4 0 0			
1807				do	4 0 0			
1808				do	4 0 0			
1809				do	4 0 0			
1810				13½	4 10 0			
1811	6 disct			8	4 4 6			
1812	19			20¾	4 15 6			
1813	16			22½	5 1 0			
1814	7			25	5 4 0			
1815.								
May	1			26½	5 6 0	0 6 9½	5 disct	
June	7½ prem			26	5 5 0		9	
July	4			19	4 16 0		11	
Aug	7	17 prem	12½ prm	14¼	4 11 0		11	
Sept Oct	18	23	21	11½	4 8 0	0 5 6	15	
Nov	14	23	22	6	4 3 0		16	
Dec	12	20	17½	6	4 3 0		14	
1816.								
Jan	12	20	17½	5	4 2 0		14	
Feb	12 prem	23 prem	17½ pre	5 disct	4 2 0		14 disc	
Mar	16	17½	do	5	4 2 0	0 5 4	12½	
Apr	16	17¼	do	5	4 2 0	0 5 2½	14½	
May	19	12	20	2¼	4 0 0		14	
June	19	17½	20	do	4 0 0	0 5 1½	16	
July	19	do	20	do	4 0 0	0 5 0½	15	
Aug		do	15	1½	3 19 0	0 5 0	10	
Sept	15	do	15	do	3 19 0		7½	
Oct	14	12¼	15	do	3 19 0	0 5 0	9½	
Nov	10	do	7½	1	3 18 6		7	
Dec	6½	do	do	1	3 18 6	0 4 11½	7	
1817.								
Jan	2	do	do	1	3 18 6		4½	
Feb	2	9½	do	1	3 18 6		4	
Mar	2	4½	do	1	3 18 6			
Apr	2½	Par	5	1				
May	2½	do	1	1	3 18 6			
June	2	do	1 disct	1⅛	3 19 0			
July	1¼	do	do	do	3 19 0			
Aug	2	do	do	2¾	4 0 0	0 5 3½		
Sept	1⅞	do	do	do				
Oct	2	⅜ prem	do	do	4 0 0			
Nov	2	do			4 0 0	0 5 3¼		
Dec	2	do				0 5 3½		
1818.								
Jan	2	do		3½	4 0 6			
Feb	2							
Mar	½							
Apr	Par			4	4 1 0	0 5 4		

TABLE H—Continued.

	Exchange on			Paper medium of England, valued in gold.	London price of gold, per ounce.	London price of silver, per ounce.	Paper medium of Philadelphia, valued in specie.	Philadelphia premium on gold, valued in silver.
	London.	Paris.	Amsterdam.					
					l. s. d.	*l. s. d.*		
1818.								
May	Par			5¾				
June	¼ prem			4½				
July	1¼							
Aug	1		do	4¼				
Sept	1	¾ prem	None	do	4 1 6	0 5 5	Par	
Oct	Par	do		do	4 1 6	0 5 7½		
Nov	Par	do		do		0 5 4½		
Dec	Par	do				0 5 6		
1819.								
Jan	1 disct	do				0 5 5½		
Feb	1¼	do				0 5 7		
Mar	1½	do		4½	4 1 6			
Apr	Par	do		4	4 1 0			
May	2 prem	do				0 5 6		
June	2½ prem	¼ pre				0 5 2½		
July	Par	do				0 5 2		
Aug	½ prem			¼ dis	3 18 0	0 5 2		
Sept	2					0 5 2		
Oct	2½			par	3 17 10½	0 5 2		
Nov	3			1 dis	3 18 6	0 5 2		
Dec	2½			¼ do	3 18 0	0 5 2		
1820.								
Jan	1			Par	3 17 10½	0 5 2		
Feb	1			do	do	0 5 2		
Mar	1			do	do	0 5 1½		
Apr	Par			do	do	0 5 1		
May	½ disct		6¼ disct	do	do	0 5 0½		
June	Par	6 disct	do	do	do	0 5 0½		
July	1½ prem	do	do	do	do	0 5 0		
Aug	do	do	do	do	do	0 5 0		
Sept	do	do	do	do	do	0 4 11½		
Oct	2	do		do	do	0 4 11½		
Nov	2½	do		do	do	0 4 11½		
Dec	3½	do		do	do	0 4 11½		
1821.								
Jan	3¾	do		do	do	0 4 11½		
Feb	4½	do		do	do	0 4 11½		
Mar	5¾	do		do	do	0 4 11		
Apr	7¼			do	do	0 4 11	Par	
May	10				do	0 4 11		
June	9¼		1 disct		do	0 4 10		1 prem.
July	9½	2½	1		do	0 4 10½		do.
Aug	do	Par	1		do	0 4 11		do.
Sept	do	do	1		do	0 4 11		1½
Oct	do	do	Par		do			do.
Nov	9	do	do			0 4 11		do.
Dec	12½	do	do		do	0 4 11½		5
1822.								
Jan	13	do	do		do	0 4 11½		5½
Feb	13	2¾	do		do			
Mar	12½	do	do		do	0 4 11		7
Apr	12½	do	1¼ prem		do	0 4 11½		6
May	10	do	do		do			4½
June	8½	do	do		do			
July	9½	do	do		3 17 6	0 4 11		
Aug	10½	do	do		do	0 4 11½		4½
Sept	12½	do	do		do	0 4 11½		
Oct	12 prem	2¾ prem	1¼ prem		3 17 6	0 4 11½		5½ pre.
Nov	12½	do	do		do			5
Dec	13	do	do		do	0 4 11½		5
1823.								
Jan	12½	3¼ prem	do		do	0 4 11½		5
Feb	10½		do		do			4½
Mar	8½	¾ disct	do		do	0 4 11½		2½
Apr	5½	do	do		do	0 4 11½		1
May	5	2½	Par		do	0 4 10½		1
June	5	do	do		do			¾
July	6¼	do	do		do	0 4 11		1
Aug	8	do	do		do			1
Sept	7	do	do		do	0 4 11		1
Oct	7½	do	do		do	0 4 11		2
Nov	do	do	1 disct		do			2
Dec	do		1		do			1½

TABLE H—Continued.

	Exchange on			Paper medium of England, valued in gold.	London price of gold, per ounce.	London price of silver, per ounce.	Paper medium of Philadelphia, valued in specie.	Philadelphia premium on gold, valued in silver.
	London.	Paris.	Amsterdam.					
					l. s. d.	*l. s. d.*		
1824.								
Jan	do	2¼	1		do	0 4 11½		2
Feb	do	do	1		do	do		2
Mar	8¾	¼	1		do	do		2
Apr	9¼	do	1		do	do		3
May	9	do	1		do	do		3
June	9¼	do	1		do	do		3½
July	9	do	1		do	do		3
Aug	9	do	1		do	do		2½
Sept	9¼	do	1		do			do.
Oct	11¼	do	1		do	0 5 0½		do.
Nov	9¼	2¾ prem	1		3 17 8			2¾
Dec	do	2	1½ prem		3 17 9	0 5 0½		4
1825.								
Jan	10¼	2	do		do	do		4
Feb	9	2	do		do	do		4
Mar	9¼	2	do		do	0 5 0¾		4½
Apr	9	2	do		do	0 5 1		3½
May	6	¼ disct	1½		do	0 5 1		3¼
June	5	¼ prem	do		do	0 5 0½		2½
July	5½	⅛ disct	do		do	0 5 0⅜		2¼
Aug	5¼	⅛	do		do	0 5 1		2
Sept	10	2¾ prem	do		3 17 10½	0 5 1		4½
Oct	10	do	3		3 17 7	0 5 1		4¾
Nov	9¼	¼	2¼		3 17 10½	0 5 1¼		4
Dec	9	1¼ dis			3 17 6	0 5 0¾		4
1826.								
Jan	7¾ prem	2 disct	Par					3 prem.
Feb	8	¾	do					3½
Mar	8¼	3	do					3½
Apr	8	1½	do					4
May	9¼	do	do					4
June	9¼	do	do					4
July	10¼	do	1¼ disct					4
Aug	10¼	¾ prem	Par					4¼
Sept	11¼	¼	do					5
Oct	12¼	Par	1¼ prem					6
Nov	11¼	¼ prem	¼					5¼
Dec	11¼	¼	¼					6
1827.								
Jan	11⅛	¼ disct	¾					6¼
Feb	11	¼	¾					6¼
Mar	10¾	⅛	Par					5⅞
Apr	10¼	1¼ prem	¾ prem					5¼
May	10⅛	2¼	1¼					5⅛
June	10¾	2¼	do					6
July	10	2	⅛					5¾
Aug	10	2	1¼					4⅞
Sept	10¼	2	do					6
Oct	11	2¼	3¼					6
Nov	11¼	2¼	do					6¾
Dec	11	2¼	1¾					6¼
1828.								
Jan	10⅜	1¾	2¼					5⅛
Feb	10¼	1¾	do					5⅜
Mar	11	2	3⅛					5
Apr	11	2¼	3⅛					6⅛
May	10¼	2	1¼					5¼
June	11	2¼	3					6
July	10⅜	2¼	2⅛					6
Aug	9¼	1⅜	2⅛					
Sept	10¼	1¾	1¾					4⅛
Oct	11	2¼	2					5⅛
Nov	10⅜	2¼	2⅛					5¼
Dec	10	2¼	1¾					5
1829.								
Jan	8¼	¼ disct						
Feb	8¼	¼	1⅛					
Mar	8¼	1	1¼					5
Apr	8¼ prem	1 prem	1½ prem		3 17 9	0 4 11⅜		4 prem.
May	9⅛	1¾	do		3 17 9	0 4 11½		4
June	9¼	1¼	⅜		3 17 9			3½
July	8¼	⅜	par		3 17 9	0 4 11½		4
Aug	9¼		do		3 17 9	0 4 11⅜		3½
Sept	9¼		do		3 17 9			3¾

TABLE I.

A STATEMENT of the current rate of 60 days Bills of Exchange on London, in the Boston market, from the year 1795 to 1827, inclusive, excepting the year 1823.

In the years 1823 and 1828, sixty days bills averaged about nine per cent. advance. The price for the present year (1829) is about 8½ per cent. advance.

EXCHANGE.

Date.	At Par.	Above Par.	Below Par.
1795.			
September	par		
October	do		
November	do		
December			1½
1796.			
January			5
February			7
March			4
April			5
May			5½
June		2	
July		½	
August		¼	
September			1½
October	par		
November			2
December			3
1798.			
June	par		
July			1 a 2
August			1 a 2
September			3
October			3 a 5
November			3 a 5
December			3 a 5
1799.			
January			4 a 5
February			5
March			5 a 6
April			5 a 6
May			6 a 7½
June			7 a 7½
July			7½ a 10
August			10
September			10
October			6 a 7
November			5 a 7½
December			5½ a 7½
1800.			
January			4½
February			1 a 2½
March			1½ a 2
April		1 a 2½	
May		2	
June		2½	
July		2½ a 3	
August		1 a 2½	
September	par		
October		2	
November		2 a 2½	
December		2	
1801.			
January			1
February			2½ a 3
March			4½ a 6½
April			3
May			1½
June			2½
July			4½ a 5
August			4 a 4½
September			1 a 3
October			1½ a 2½
November			2½
December			1 a 2½
1802.			
January			3
February			3½
March			2½
April			2½
May			1½ a 2½
June			1½ a 2

Date.	At Par.	Above Par.	Below Par.
1802.			
July			1
August			½
September			½
October			½
November		½	
December		½	
1803.			
January		1	
February		1	
March		1	
April		1 a 2½	
May		2 a 2½	
June		3 a 3½	
July		1 a 3¼	
August		1½ a 2	
September		2	
October		1½ a 3	
November		4 a 4½	
December		4 a 4½	
1804.			
January		3	
February		2 a 2½	
March		1 a 2½	
April		2½	
May		2	
June	par		
July		¼	
August		¼	
September		½	
October		1½	
November		2½	
December	par		
1805.			
January			1
February			1½
March			1½
April			1½
May			1½
June			3
July			5
August			6
September			4½
October			2
November			2
December			3½
1806.			
January		2½	
February		2	
March		1½	
April	¼		
May	¼		
June		¼	
July		½	
August		1½	
September		1	
October		1	
November		¼	
December		2¼	
1807.			
January		2	
February		¾	
March		¼	
April		1½	
May		2½	
June		2¾	
July		3½	
August		3¾	
September		4	
October		2½	
November			2
December			¼

TABLE I.—Continued.

EXCHANGE.

Date.	At Par.	Above Par.	Below Par.
1808.			
January		4⅛	
February		3⅞	
March		4	
April		5⅛	
May		6⅜	
June		6	
July		6¼	
August		6⅜	
September		5⅛	
October		4⅛	
November		4⅜	
December		8	
1809.			
January		9⅛	
February		7	
March		2⅜	
April		3	
May		⅛	
June		⅜	
July		1	
August		2	
September		1⅛	
October		1	
November		⅛	
December			1⅛
1810.			
January			3⅜
February			3⅛
March			3
April			3⅜
May			3
June			2⅛
July			4⅛
August			5⅛
September			5⅛
October			6⅛
November			7
December			7⅛
1811.			
January			8⅛
February			9⅛
March			11⅜
April			10⅛
May			11
June			13⅛
July			18⅛
August			20⅛
September			21⅛
October			18⅛
November			17⅛
December			17
1812.			
January			17⅜
February			16⅜
March			19⅛
April			21⅛
May			20
June			20⅛
July			24⅜
August			21⅛
September			22
October			17⅛
November			14⅞
December			18⅛
1813.			
January			18⅛
February			18
March			16⅛
April			16⅛
May			15⅜
June			15⅛
July			14⅛
August			14⅛
September			14⅛
October			14⅛
November			14
December			12⅛ *a* 6⅛
1814.			
January			—
February			8
March			10⅛
April			5⅛
May			10⅛
June			12⅛
July			12⅛
August			12⅛
September			12⅛
October			13
November			
December			13
1815.			
January			
February			13
March			8⅛
April			8⅛
May			6
June			6
July			12⅛
August			9⅛
September			3⅛
October			2⅛
November			3⅛
December			3
1816.			
January			2
February			⅛
March		1⅛	
April		3⅛	
May			1⅛
June			2 *a* 2⅛
July			⅛
August		⅛	
September		3⅛	
October		4⅛	
November		4⅛	
December		2⅛	
1817.			
January		⅛	
February			⅛
March		1 *a* 2⅛	
April		2⅛ *a* 4	
May		1⅛	
June		1⅛	
July		1⅛	
August		⅛	
September		1⅛ *a* 3⅛	
October		2 *a* 2⅛	
November		1⅛	
December		1⅛	
1818.			
January		2	
February		2	
March		⅛	
April		⅛ *a* ⅛	
May			⅛
June			⅛
July			⅛
August			⅛
September		⅛	
October		⅛ *a* ⅛	
November			⅛ *a* 2
December			2 *a* 2⅛
1819.			
January			1⅛ *a* 2⅛
February			1⅛
March			⅛ to 1
April			⅛
May		⅛	
June			⅛
July			⅛
August		⅛	
September		2⅛	
October		1⅛	
November		1⅛ *a* 2	
December		1⅛ *a* 2	
1820.			
January		1 *a* 2	
February			1⅛
March		⅛ *a* 1⅛	
April	par		
May			⅛
June			⅛

TABLE I.—Continued.

EXCHANGE.

Date.	At Par.	Above Par.	Below Par.	Date.	At Par.	Above Par.	Below Par.
1820.				1824.			
July		¾ to 1½		October		10 a 10¾	
August		1½ a 2		November		10	
September		2		December		9¾	
October		2 a 2¾		1825.			
November		2½ a 3		January		9¾ a 10½	
December		3⅜		February		9¼ a 9¼	
1821.				March		9½	
January		3½		April		9½	
February		4½ a 5		May		6½ a 9	
March		5 a 6		June		5¼ a 6	
April		6½ a 8½		July		5¼ a 6	
May		7½ a 9		August		5½	
June		8¼ a 9		September		7 a 16½	
July		8 a 8¾		October		9½ a 10¼	
August		8¼ a 9		November		9½	
September		8½ a 9		December		8¼	
October		9½		1826.			
November		9 a 10		January		7½ a 8¾	
December		10½ a 12¾		February		8¼ a 9½	
1822.				March		8	
January		11 a 11½		April		7½ a 9	
February		11½ a 13½		May		8½ a 9	
March		12 a 13½		June		8¾ a 9¼	
April		12½ a 13		July		9¼ a 10	
May		10½ a 12½		August		9¼ a 10¾	
June		8 a 10		September		10½ a 11½	
July		9¼		October		10½ a 10¾	
August		10¼ a 11		November		10¾ a 11	
September		11 a 12		December		11 a 12	
October		11½ a 12½		1827.			
November		12½		January		10¾ a 12	
December		12 a 12½		February		9¼ a 10½	
1824.				March		9¼ a 9¾	
January		7½		April		9¾ a 10½	
February		7½ a 8½		May		9¾ a 11½	
March		9¼		June		11	
April		9		July		10 a 10¼	
May		8¾ a 10		August		10¼	
June		9 a 10½		September		10¼ a 11¼	
July		8¾ a 9¾		October		11⅛	
August		8¾		November		10¾ a 11¼	
September		9 a 9¾		December		11⅛	

TABLE K.

AVERAGES of Exchanges and Premiums on Gold and Silver Coins and Bullion.

NEW YORK.

	1817.	1818.	1819.	1820.	1821.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829, to July, inclu.
England,	101 68/100	100 0625	100 98/100	101 38/100	108 1/2	112 14/100	107 1/2	109 13/100	108 8/10	110 37/100	110 65/100	110 53/100	108 68/100
France,	5. 37 3/10	5. 37 7/10	5. 39 4/10	5. 53 1/4	5. 33 1/4	5. 21	5. 31 3/4	5. 25 1/8	5. 19 3/10	5. 31 1/4	5. 18	5. 16 6/10	5. 20 7/10
Holland,	39 4/10	39 66/100	39 6/10	37 9/10	39 1/4	40 14/100	39 68/100	40 44/100	40 62/100	39 68/100	40 1/4	41 14/100	40 46/100
Spanish dollars,	102 1/8	104 8/10	108 1/8	100 33/100	100 1/8	101 42/100	100 09/100	100 9/10	101 42/100	100 4/10	100 9/10	100 1/4	100 46/100
Mexican dollars,											100 1/4	100 87/100	100 1/4
Spanish doubl'ns,	15. 50 4/10	15. 69 68/100	15. 53 1/4	15. 00	15. 65 100	15. 51 8/10	15. 56 4/10	15. 67 4/10	15. 82 1/8	15. 63	15. 98 3/4	15. 91 2/10	15. 93 3/8
Mexican or Colombian doubloons,								15. 47 1/10	15. 56 3/8	15. 24 68/100	15. 46	15. 46 1/8	15. 30
Heavy British gold,					104 68/100	106 48/100	106 8/10	108 1/8	106 9/10	109 40/100	110 16/100	109 83/100	108 83/100
Light British, Portug'se, Fr., & Amer. gold,		100 83/100	100 27/100	100 33/100	101 34/100	104 7/10	102 53/100	102 3/8	103 3/10	105	106 1/2	105 7/8	104 7/10

L.—*A TABLE exhibiting sales of Gold at different periods in London, with the difference between the gross and nett amount in England, and the deductions from the gross amount for Insurance, Commissions, &c.*

Date.	Gross amount.	Charges.	Nett proceeds.	Difference.	Commissions, Insurance, Interest on amount for 15 days, &c.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.
April 12, 1822,	1896 13 10	12 12 0	1884 1 10	66.43/100	28 9 0
December 18, 1821,	2174 5 10	7 19 10	2166 6 0	36.75/100	32 12 3½
December 31, 1821,	2932 17 8	10 11 3	2922 6 5	36.1/100	43 19 10½
September 21, 1821,	3225 1 7	15 19 3	3209 2 4	49.49/100	48 7 6
December 31, 1821,	1342 3 11	4 18 1	1337 5 10	36.23/100	20 2 7½
July 18, 1822,	835 2 5	3 6 3	831 16 2	39.67/100	12 10 6
December 11, 1821,	293 13 0	1 6 8	292 6 4	45.45/100	4 8 0
December 11, 1821,	4663 0 2	28 1 2	4634 19 0	60.17/100	69 18 10½
December 16, 1822,	485 17 3	1 18 9	483 18 6	40.57/100	7 5 9
May 22, 1822,	1046 2 9	9 10 11	1036 11 10	87.11/100	15 13 9½
March 12, 1822,	907 8 7	3 5 4	904 3 3	36.1/100	13 12 3
September 21, 1821,	5446 12 11	24 5 7	5422 7 4	44.57/100	81 14 0
December 16, 1822,	1290 4 4	8 5 6	1281 18 10	64.14/100	19 7 0
October 16, 1821,	6375 7 0	37 8 5	6337 18 7	58.73/100	95 12 7½
September 21, 1821,	3327 3 1	16 14 5	3310 8 8	43.42/100	49 18 1½
	36241 14 4	186 3 5	36055 10 11	59.88/100	543 12 2½

Averaging 2 per cent.

An Historical Table of English Coins, showing the alterations they have undergone, from the reign of William the Conqueror to that of George IV, with respect both to their weight and fineness. Also, a statement of the comparative value of Gold and Silver Coins, at different periods, according to the respective Mint regulations.

Date.	Reign.	Silver.		Gold.		Comparative value of fine gold and silver.
		Fineness of Silver Coins.	Pound Troy of such silver, coined into	Fineness of gold coins.	Pound Troy of such gold, coined into	
		Oz. dwt.	£ *s. d.*	*Car. grs.*	£ *s. d.*	*Gold. Silver.*
1066	William I.	11 2	1 1 4			
1280	8 Edward I.		1 1 4			
1344	18 Edw. III.		1 1 6	23 3½	14 0 10	1 to 12.584
1349	23 do.		1 3 0		14 18 8	1 11.571
1356	30 do.		1 6 8		16 0 0	1 11.158
1421	9 Henry V.		1 12 0		17 16 0	1 10.331
1464	4 Edward IV.		2 0 0		22 4 6	1 10.331
1465	5 do.		2 0 0		24 0 0	1 11.158
1470	49 Henry VI.		2 0 0		24 0 0	1 11.158
1482	22 Edw. IV.		2 0 0		24 0 0	1 11.158
1509	1 Hen. VIII.		2 0 0		24 0 0	1 11.158
1527	18 do.		2 2 8	22 0	24 0 0	1 11.268
1543	34 do.	10 0	2 8 0	23 0	28 16 0	1 10.434
1545	36 do.	6 0	2 8 0	22 0	30 0 0	1 6.818
1546	37 do.	4 0	2 8 0	20 0	30 0 0	1 5.000
1547	1 Edw. VI.	4 0	2 8 0	20 0	30 0 0	1 5.000
1549	3 do.	6 0	3 12 0	22 0	34 0 0	1 5.151
1551	5 do.	5 0	3 12 0	23 3½	34 0 0	1 11.000
1552	6 do.	11 1	3 0 0	22 0	36 0 0	1 11.050
1553	1 Mary	11 0	3 0 0	23 3½	36 0 0	1 11.057
1560	2 Elizabeth	11 2	3 0 0	22 0	36 0 0	1 11.100
1600	43 do.		3 2 0	23 3½	36 10 0	1 10.904
1604	2 James I.		3 2 0	22 0	37 10 0	1 12.109
1626	2 Charles I.		3 2 0		41 0 0	1 13.346
1666	18 Charles II.		3 2 0		44 10 0	1 14.485
1717	3 George I.		3 2 0		46 14 6	1 15.209
1816	56 Geo. III.		3 6 0		46 14 6	1 14.287
1821	2 George IV.		3 6 0		46 14 6	1 14.287

By the above table it appears that silver coins have been diminished in value, during the last five hundred years, in the ratio $3\frac{1}{11}$ to 1, and gold coins nearly as $3\frac{1}{2}$ to 1. It may be remarked, that, within the same period, the silver coins of France and Spain have been debased in the ratio of about 17 to 1.

Account of sales of United States' Eagles, with the allowances, deductions, and charges, from Liverpool to London.

The Eagles weighing, before melting			*Oz. dwt. grs.* 859 8 0	
	Oz. dwt. grs.			
After melting into five bars	857 19 12			
Dross retained by melters	0 17 12			
			858 17 0	and allowed,
Loss by melting			0 11 0	£3 7 9

	Oz. dwt. grs.			
4 bars, weighing	676 2 12			
Deduct, being ½ a grain worse than standard	3 16 20			
		672 5 16		
1 bar, weighing	181 17 0			
Deduct, being ¼ of a gr. worse than standard	0 10 8			
		181 6 16		
Standard,		853 12 8	£3 17 10½ pr. oz.	3323 15 4
Sterling,				3327 3 1

Charges.

	£	s.	d.			
Carriage from Liverpool to London	0	14	9			
Proportion of Mr. M.'s expenses for taking charge of the gold to London	3	15	0			
Coach hire to refiners	0	2	0			
Melting 71 lbs., at 8*d.*, £2 7*s.* 4*d.*; drink money, 1 *s.*	2	8	4			
Assaying, £1 5*s.* 6*d.*, Bank porters, 2*s.* 6*d*	1	8	0			
Commissions on £3327 3*s.* 1*d.*, at ¼ per cent	8	6	4			
				£16	14	5
				3310	8	8

LONDON, *September 21st*, 1821.

A statement of actual sales of Silver.

Shipment from Baltimore to Liverpool—						
76000 Spanish South American dollars, weighing 65822*oz.* 10*dwt.* 10*grs.*, at 58½*d.* per *oz*	£15941	7	8			
Charges, not including insurance	113	0	0			
Net proceeds				£15828	7	8
Which, at 8.45 per cent. premium on bills, is				$76292	80	
76000 dollars cost, premium ⅛ per cent				$76285	00	
24000 dollars, in half dollars, United States coinage, direct from the U. S. Mint, weighing 20813 *oz.* at 57¼ *d*	£5018	19	4			
Charges, not including insurance	35	0	0			
Net proceeds				£4983	19	4
Which, at 8.35 per cent. premium on bills, is				$24000	56	

	Oz.	*dwt.*	*grs.*
Weight of $76000, at 416 grains per dollar, would be	65866	13	8
Do the same, per account rendered	65822	10	0
Loss in weight on the above	44	3	8
Weight of $24000, in half dollars, United States coin, as per account	20813	0	0
Do at 416 grains per dollar	20800	0	0
Gain in weight on the above	13	0	0

OFFICE BANK UNITED STATES,
Baltimore, November 16, 1829.

SIR: I have to express regret, that the performance of indispensable duties, has prevented an earlier reply to your letter of the 21st of July last.

Your first inquiry is—What is the standard weight (troy) and fineness of the current gold and silver coins of the principal commercial nations of Europe?

The estimates of the intrinsic value of those coins, presented in the annexed table marked (AA) have been made to correspond, as nearly as practicable, with the mint regulations of the respective countries which issue them. And although some difficulty has been experienced, from the variable practice of the mints, in regard to the remedy allowed by law, yet their comparative value, will thus, it is conceived, be most correctly exhibited, in the absence of assays, of the greater part of these coins, by our mint.

Query 2. What is the market value of the above mentioned coins, of standard weight and fineness, in the principal commercial cities of the United States, expressed in the established unit, viz: the dollar and its parts, estimated in the coin of the United States, and what has been the market value of these coins at their current weight?

The only European coins which appear in our commercial cities, are the gold coins of England, and Spain and Portugal, and the five franc silver coins of France. Guineas and sovereigns of *standard weight and fineness*, are governed in price by the rate of exchange, which being at present nine and one half per cent. premium, they pass readily, by tale, at $5\frac{6}{100}$ dollars for the former, and at $4\frac{82}{100}$ each for the latter. Those of Spain and Portugal are worth five per cent. advance upon their respective mint prices. Five franc pieces command one and one half to two per cent. premium, upon their legal value, which is $93\frac{3}{10}$ cents each; these pieces have always passed currently by tale at the latter price, but European gold coins circulated by weight until 1821; since which period only, have any of these coins borne any premium.

Query 3. What is the average difference between the standard and current weight of the respective foreign gold coins, usually found in the money market of the United States. Also, what is the difference, if any, between their actual and standard fineness?

I beg leave to refer you to that portion of table (AA) which states the result of various assays made at the mint of London, and also at our mint. The gold coins of England appear to be manufactured with great skill and integrity. Those of Portugal are found generally defective in fineness from $\frac{1}{8}$ to $\frac{1}{4}$ grain; and those of Spain, and her former colonies, from $\frac{9}{16}$ to 1 grain, upon the standards, which are 22 carats for the former, and 21 carats for the latter.

Query 4. What have been the rates of exchange between the United States and the principal commercial nations of Europe, the value of bills in the United States being estimated in the money of the United States as above?

I have annexed exchange tables marked (BB) Nos. 1, 2, and 3. No. 1 exhibits the course of exchange with London, being compiled chiefly from the average monthly sales effected by two mercantile houses of high standing. No. 2 details the average annual rates with Hamburg, Holland, and France, and I have thought it expedient, in consideration of the defective nature of these last returns, to add No. 3, which reports the rates of exchange prevailing for a series of years between those places and London, through which latter city remittances to us, from the continent of Europe, have, until lately, generally been made.

It is worthy of remark and consideration, in reviewing the course of exchange which has prevailed with England, (the country whose transactions have, in a great degree, regulated our exchanges with the rest of Europe,) that the *nominal par*, upon which we have been accustomed to calculate its favorableness or adverseness, is $2\frac{72\frac{1}{2}}{100}$ per cent. *less* than

the *real* par in gold, and 4 per cent. *less* than the *true* par in silver. Without referring to the latter rate, (as silver is restricted as a tender above 21*s.* sterling,) it is evident that, with the exception of the periods of the embargo, and of the suspension of the specie payments, and of two or three other rare occasions, the exchange with England was regularly in our favor until 1821. In May of that year, the Bank of England was required to pay its notes, when presented to the value of £233 12*s.* 6*d.* in gold coin, or in bullion, at the legal standard rate of £3 17*s.* 10½*d.* per ounce; which requisition had an immediate and great effect upon the rate of exchange with London. In June, 1821, it rose to ten per cent. and if allowance be made for the temporary decline in 1823 and 1825, occasioned by erroneous anticipations, in the first instance, that the invasion of Spain would lead to a general war in Europe; and in the latter year, that the enhanced value of cotton would favorably influence the aggregate balance of our foreign transactions, it will be found, that the average rate of exchange with London, during the eight and one half years which have since elapsed, has been fully ten per cent. premium on the nominal par of 4.44⅘ cents, or seven and one tenth per cent. upon the real par of 4.56 $\frac{56}{100}$ cents in gold—the natural effects of this difference. The exportation of gold has, I apprehend, occasioned a very prevalent impression, that this metal has been estimated too low, in reference to silver, when it may, perhaps, be much more correctly attributed to the exclusion of *silver*, and to the improved and comparatively superior state of the currency of England. Our circulation is essentially paper, resting for its security upon a specie basis possessed by the banks; whereas theirs is similar for commercial operations, but it is composed altogether of coin, for disbursing the wages of labor; and for effecting the minor transactions of society.

5th Query. "What has been the difference, if any, between the market value of the legal coins of those nations, and their 'current medium,' in which mercantile and exchange accounts were reported?"

In Hamburgh and in Amsterdam, exchange accounts have been reported, and bills have been paid, for a long period, in "bank money," which consists of transfers of deposites made in silver coin or bullion. In the Bank of Amsterdam, gold was also received on deposite, but in both places it is viewed as a commercial commodity, varying with the market, and *silver alone* is the legal measure of value. The bank money of Hamburgh has generally borne a premium of 23 to 25 per cent. in exchange for the "current medium," and in Amsterdam, during the existence of "bank money," the difference usually was, an agio or premium of 2 to 4 per cent. In Holland the old regulations have ceased, and all payments are now made in "current money." The lawful currency of Portugal is at a discount of 13½ per cent. in reference to coin—payments being made, one-half in coin, and one-half in paper, the latter estimated at 27 per cent. discount.

6th Query. "What is the entire expense of transporting gold and sil-

ver coins from the United States to the principal commercial nations of Europe, respectively; also, that of gold and silver bullion."

The shipments of coin and bullion to Europe have been confined to England and France, and having been effected chiefly by houses connected with commercial establishments in those countries, they have been made on very low terms. The entire expense on the *standard* coins of England and France is from one to one and one-eighth per cent. and as they are, upon arrival, effective in payments, a deduction of sixty days' interest, equal to two-thirds of one per cent. in the one instance, and five-sixths of one per cent. in the other, should be made, which will reduce the actual expense to three-tenths and one-half of one per cent. when compared as a remittance with a bill of exchange at sixty days' sight. By the annexed statements, marked CC, which are founded upon actual sales, it appears that the expense of transporting *light* British gold to England is about $1\frac{27}{100}$ per cent. and that upon Portuguese or American gold, it amounts to $1\frac{6}{10}$ per cent. The charges upon shipments of Mexican, or other new dollars, amounted to about nine per cent. (exclusive of premium here) when sales were made at 4*s*. $9\frac{3}{4}$*d*. stg. per oz. which was about the average price last year. The latest quotation from London is but 4*s*. $9\frac{1}{8}$*d*. per oz. at which rate the expenses would be $10\frac{1}{5}$ per cent. Our half dollar sold at $\frac{1}{8}$ to $\frac{1}{4}$ sterling per oz. lower price, and being generally rather deficient in weight, they appear to have made a worse remittance by one-half per cent.

I do not understand that any gold has been shipped to France; but the charges and loss upon half dollars have been equal to about $3\frac{5}{100}$ per cent. or to a bill remittance at $5\frac{19}{100}$ francs per dollar. Old Spanish dollars were shipped at an expense of about $2\frac{15}{100}$ per cent. and Mexican, and other new coins, at $2\frac{1}{10}$ per cent. It is to be recollected, that the dollars of the former Spanish colonies, sold, during the period of demand referred to, at from one-half to one and one-quarter per cent. *premium*.

7th Query. "What premium has been given for the United States' gold coin, and for silver coin, at the same point of time, estimated in the same bank paper, during the suspension of specie payments by the banks in the United States?"

I am not informed whether or not a difference existed (other than the legal) in the relative value of our gold and silver coins, when sold for bank paper, during the suspension of specie payments. Table D D, furnishes all the information which I possess in relation to the sales of specie generally, for bank notes during that period.

8th Query. "What premiums, if any, have been given before or since the specie suspension for either gold or silver coins of the United States?"

9th Query. "Are the gold coins of the United States regularly or casually bought for exportation; if so, in what country are they chiefly melted or re-coined?"

10th Query. "The same as to silver coin?"

In reply to these three questions, I beg leave to observe, that I am not aware that our gold or silver coins have borne a premium (excepting when specie payments were suspended) until the spring of 1821, when the Bank of England commenced paying its notes in gold, at the mint price. Since that period our gold coins have been regularly in demand, and, I believe, exclusively for the London market (and for that mint, or for manufacturing objects,) at a premium varying with the fluctuations in exchange, and averaging from 4½ to 5 per cent. upon our *mint* price, which is equivalent to 7⅓ to 7⅔ per cent. advance, when compared with the nominal rate of exchange on London. As foreign gold and silver coins have, at all times, constituted a very large proportion of our specie, I think it appropriate (if not necessary) to remark, in addition, that, antecedent to our late war, Spanish dollars bore a premium of from one to three per cent. for the Asiatic trade. Since the peace, that demand has been less active, and the amount exported is now greatly reduced; but in 1827 and 1828, very extensive shipments of silver coins, chiefly of the new dollars of the former Spanish colonies, were made to England and France, at the rates already mentioned. Foreign gold coins have continued in regular demand, at similar rates, according to their fineness, that is, at 4½ to 5 per cent. premium on their *mint* value, for the English market also. Doubloons have not, I believe, been shipped to England at a higher price than fifteen and one-quarter dollars each. Sovereigns and English guineas, of full weight, (of each of which the importations by passengers, from the United Kingdom, continue to be large,) have sold regularly, when offered in considerable sums, at within *one* per cent. of the current premium for bills on London at sixty days.

11*th Query.* "What premium was given in England for standard gold or silver, in bank paper, during the suspension of specie payments, or since?"

I have to request your reference to table EE, which exhibits the price of gold and of silver during the suspension of specie payments by the Bank of England; the amount of its issues at various periods; and the price and relative value of gold to silver since 1760; which two latter collections will contribute, it is conceived, to a more full exposition of the various circumstances apparently connected with the main object of your queries.

12*th Query.* "Are there any known causes founded on the supply or demand for gold or silver, calculated to change their relative value? If so, do these causes operate progressively, or do they fluctuate?"

I regret to state my inability to furnish you with any satisfactory information, upon which a reasonable conjecture might be formed, as to the extent of the actual "*demand*" for gold or silver. The great and effective "demand" must be for *other* objects than coinage, and as those objects increase progressively with the general increase of wealth, and change with the caprices of fashion, it is difficult to estimate, with any approximation to correctness, the amount either of the *entire* demand,

or of the *relative* demand, for these metals, for the various objects of consumption. The demand for coinage is *not comparatively great*, for, however rapidly commerce may extend, or commodities may be multiplied in variety, or in amount, yet mercantile ingenuity has so materially facilitated the transfer of productions, by the use of bills of exchange, and by the more recent introduction of bank notes, that the aggregate amount of metallic currency does not necessarily increase in a ratio with the increase of trade. National interest requires, (precisely what the operations of unrestrained commerce will effect) a just distribution of the amount of the precious metals actually existing in currency; but it is not perceived that a considerable increase or diminution of the entire amount, thus used, would either materially promote or retard the prosperity of the commercial world.

In 1770, Mr. Necker estimated the consumption of gold and silver in France, for other objects than circulation, at two millions of dollars annually; in 1789, Mr. Peuchet calculated that it had risen to four millions; but in 1803, Count Humboldt computes it to be six millions of dollars, of which amount gold was to silver in *value* as 12 to 18, and in *weight*, in the proportion of 1 to 22; and he thence estimates, that the quantity annually manufactured in Europe, at that period, must have amounted to twenty-three millions of dollars; and that the waste and loss *alone*, thus resulting, would be equivalent to the yearly produce ($4\frac{1}{2}$ millions) of the mines of Europe and of Siberia.

The accounts of the assay offices for 1806 to 1809, inclusively, state the quantity stamped and marked in Great Britain; from which record it appears that six thousand ounces of gold, and one million of ounces of silver, was the quantity consumed annually in plate. The consumption for other purposes must be very great, as a single London house, in the bullion trade, stated to the British Parliamentary Committee, that their *monthly* sales to the trade, averaged two thousand ounces of gold and twenty thousand ounces of silver.

According to repeated experiments made in England, it would appear, on the authority of Lord Liverpool, when master of the mint, and by the report of the officers superintending that establishment in 1807, that the wear on guineas may be estimated at about one per cent. and upon half guineas at two per cent. in fifty years; but, on silver coins, it has been found to amount, in eleven years, to one-fifth of one per cent. on crowns; $1\frac{2}{10}$ per cent. on half crowns; upwards of 5 per cent. on shillings; and $3\frac{1}{7}$ per cent. on sixpences.

Mr. Moore, in his report to the President, in December, 1826, computes the loss, by use, in fifty years, upon gold coin, at two per cent. and on silver coins, at only one per cent.

Great diversity of opinion prevails amongst intelligent and sagacious historians, as to the amount of the "supply" of gold and silver which has been furnished since the discovery of America. The product of the sixteenth and seventeenth centuries is uncertain and conjectural; but

the mint registers, which have been preserved and published, are authentic records, guiding to reasonable conclusions, as to the extent of the subsequent produce; and, as the quantity furnished during this latter period, is estimated at *nine-tenths* of the entire "supply" of the precious metals, I shall take great pleasure in submitting to your inspection and consideration, the most satisfactory information which I have been able to procure, of the aggregate produce of the American mines.

You will find in table FF, No. 1, a statement of the entire amount of gold and silver contributed by America, from its discovery, until 1803, according to the estimates of the enlightened and accomplished traveller already cited, Count Humboldt, whose superior opportunities and means of investigation render his conclusions probable, if not convincing.

The amount of the annual produce of the mines of America, at the close of the last, and also at the commencement of the present century, as well as the statement of the entire production of America, Europe, and the North of Asia, at the latter period, are also presented, and are derived from the same highly respectable authority. FF, No. 2, exhibits the average annual production, from 1790 till 1802, (as given in the British Bullion Report,) according to the estimate of Brogniart in his "Traité Elementaire de Mineralogie."

FF, No 3, details the coinage at the mints of Mexico, from 1803 till 1825, according to Mr. Ward; late a representative of Great Britain in that country; and although it is admitted to be a very defective account of the *actual* produce of the mines of Mexico, from the commencement of the Revolution, in 1810, until 1825, (which he calculates to be eleven millions of dollars yearly) yet I have, nevertheless, furnished it thus minutely and particularly, for two reasons: 1st, Because it abundantly evidences a vast reduction in the amount produced by a district of mines, which had previously contributed six-elevenths of the amount of gold and silver, and fully three-fourths of the entire quantity of silver, furnished by this continent. And, 2dly, It is presented as the data upon which I have hazarded the computation, (presuming that Revolutions in other similarly circumstanced Provinces, have been accompanied with like effects,) in completing the estimates of the amount produced; that the quantity of gold and silver furnished by the American mines has, since 1810, diminished in value, from forty-three millions, to the comparatively low annual average, of twenty-five millions of dollars.

FF, No. 4, is a summary statement of the result of my inquiries in reference to this part of your interesting query; but I find it necessary to observe, that I have experienced much difficulty in apportioning satisfactorily to each successive period, the respective quantities of gold and silver. Humboldt's details imply an intention to state the amount of *each* metal coined at the mint of Mexico, but this he has not effected earlier than 1780; nor does he distinguish the *relative* quantities, in his returns of the coinage at Potosi. He has not furnished any register of

the mint of Chili; and those of Santa Fe and Popayan are confined to the years 1788 till 1795. I have, however, found, in the interesting report already referred to, an extract from the "Mercurio Peruano de Historia Literatura Noticias publicas" which gives, in detail, the amount of gold and silver, *respectively*, coined at Mexico, from 1733 till 1793, and in Peru, from 1776 till 1794, which have facilitated my calculations. Humboldt did not visit Brazil, which has probably furnished two-thirds of the entire production of gold since 1695; but he estimates the amount, founded on the data of Raynal, at eight millions of dollars of *registered* produce, annually, for the first sixty years, and at four and one-quarter millions, subsequently; with the addition of twenty-five per cent. for the quantity *smuggled*.

Although I have adhered to this estimate of the produce of Brazil, in the compilation annexed, yet it is necessary to remark, for your consideration, that it differs *materially* from two statements alleged to be copies of manuscripts in the possession of the Portuguese Government, entitled "Instruccao para o governo de Capitaina de Minas Geraes," and "Rendemiento do Quinto do ouro das 4 Comarcas de Minas Geraes e Minas Novas," which detail, with fractional precision, the amount of the "King's fifth" in these two principal districts from 1752 till 1794; and in Goiazes, from 1788 till 1795, accompanied with a statement, that the revenue from some other mines might amount to two-thirds of this latter district. According to these records, the average annual *registered* produce of gold, for forty-three years (rating the arroba of Portuguese standard, at $8370,) did not exceed three and three-fourths millions of dollars, and that, in 1794, it had diminished to two and a half millions. The Abbé Raynal states the entire amount of gold and silver furnished by the American mines, in 287 years, at 25,570,279,924 livres, which closely approximates the annexed estimates up to 1780. I have added, as an appropriate appendage, an account of the relative value of gold to silver, from a very remote period, as recorded by Lord Liverpool in his learned and elaborate letter upon coins.

Upon a careful review of these two last statements, it appears to me, the following singular but instructive conclusions are evidently deducible:

1st. Whatever degree of uncertainty may exist, as to the precise quantity of the precious metals which was imported into Europe, during the 53 years succeeding the discovery of America, the records of that time abundantly testify that gold constituted the chief part of the supply; and that, nevertheless, its great preponderance did not produce any sensible effect on its market value, in reference to silver.

2d. It is evident that the enormous importations of silver consequent upon the exploration of Potosi (which mine alone is estimated to have supplied 150 millions of dollars, in the ten years subsequent to 1545,) did not vary the relative value of these metals by a rise in gold, as we find that Queen Elizabeth, and her eminent advisers, considered it expedient,

in 1560, to reduce the standard proportions from $11\frac{1}{10}$ to 1 to a fraction under 11 to 1.

3d. Although the quantity of these metals which reached Europe in the ninety years subsequent to 1560, bore no such relative proportion to the entire amount these possessed, as the imports of the preceding sixty-eight years must have borne, to the *small supply* existing antecedent to the discovery of the new world, yet, it is perceived, with surprise, that the influx of the first era was unimportant, compared with the effects produced during the second period; effects which settled and adjusted in Europe *a relative value* between gold and silver, and *an intrinsic value* as a measure of commerce, which have never since experienced any material change, notwithstanding the immensity in amount, of the subsequent production of these metals. In 1665, Charles II. fixed the value of gold to silver, in England, at 1 to $14\frac{1}{2}$. In Italy and in Spain it was 1 to 15, so early as 1650, at which period, it is alleged by Doctor Adam Smith, and the most intelligent of the writers on political economy, that gold and silver had fallen to their *lowest value*, in reference to the principal products of labor.

4th. The discovery of the alluvial mines of Brazil in 1695, *quadrupled* the annual average amount of gold previously produced, *yet, in* 1717, when this inundation, as it may be termed, was at its height, the British Government, by the advice of an individual of pre-eminent talents, (Sir Isaac Newton) raised the value of gold in exchange for silver to 1 for $15\frac{1}{5}$, the highest standard which has ever prevailed in that country.

5th. Although it appears that the exploration of new mines, but especially of Biscaina, Sombrarete, Catorce, and Valenciana, in Mexico, towards the middle and latter half of the last century, increased to such an enormous amount, the supply of silver, as to change the relative proportions prevailing during the previous fifty years, of 16 *to* 1 *of gold*, to 1 *to* 47 *of silver*, yet, it is evident, from the tables hereto annexed, that the market value of silver was almost uniformly *higher*, in England, than the standard of 1717.

These extraordinary circumstances in the history of the precious metals, appearing to invite and authorize the inference, that it is impracticable to affix with accuracy or utility, the value of gold to silver, by a comparison of the quantities now produced, with the respective amounts previously supplied, will, it is presumed, present an acceptable and satisfactory apology, for detailing, at such great length, the prominent facts, illustrative of this singular result.

Mr. Ricardo, a distinguished political economist, has recently promulgated the idea, that the difference of value in these metals, respectively, is precisely the difference in the amount of labor expended on their production.

In my opinion, the operations of commerce regulate and vary the value of gold to silver, uninfluenced, in any material degree, by the relative amounts of supply, or by the prescription of legal edicts. The

comparative abundance of silver, for fourteen years past, whilst the mines have been extremely unproductive, may probably be ascribed to the important diminution in the demand for India and China; but the *disappearance* of our gold coin is altogether attributable to the reformation in the currency of England, which created an *unprecedented* demand, probably not less in amount than *twenty millions of pounds sterling*, and the great change thus unavoidably produced in the *denomination* of our specie basis, (gold having been so abundant previously, that I was enabled to transmit to the Parent Bank, from this office, between November, 1819, and June, 1820, upwards of $240,000,) has excited public attention, and induced the impression, that the legal standard requires modification. It should not, however, escape remark, that the *variations* in the value of gold to silver, though generally too minute to have a sensible effect upon ordinary transactions, are nevertheless as frequent as the vicissitudes of trade; and it is therefore deserving of grave and deliberate consideration, when devising a remedy for this alleged evil, whether, or not, it is judicious, expedient, or suitable, that *two* metals, subject to such frequent *variations* in value, should be the established *measure* of commerce, which ought, if practicable, to be uniform and *invariable.*

Sir William Petty, Mr. Harris, Mr. Locke, and Lord Liverpool, were of opinion, that "the money or coin which is to be the principal measure of property, ought to be made of *one* metal only;" and Lord Liverpool contended, that *gold* was the most appropriate metal for the currency of England. Mr. Locke most correctly observes, that "money is the measure of commerce, and of the rate of every thing, and therefore ought to be kept (*as all other measures*) as *steady* and *invariable* as may be." He adds, that "*one* metal alone can be the money of account and contract, and the measure of commerce in any country," and that "the *fittest* for this use, of all other, is *silver*—an opinion justly entitled to serious deliberation, in consideration of the *peculiarity* of our *position* as a trading nation. In the event of such a selection, gold would continue to be equally serviceable in liquidating State or National balances, and its intrinsic and well ascertained value abundantly secures its being current and available, like an undoubted bill of exchange, in effecting large payments. It should not be altogether excluded from the mint, nor from general circulation, as its portableness, in comparison with silver, recommends it particularly for use, as a subsidiary currency, limited to effect small payments, and when confined to that object, it is susceptible of *considerable appreciation* in value, in reference to silver, without hazarding the loss of our silver, or unfavorably influencing prices.

I have the honor to be, Sir, your very obedient servant,

JOHN WHITE, *Cashier.*

To the Hon. S. D. INGHAM,
Secretary of the Treasury, Washington.

TABLE AA.

ESTIMATE of the quantity of fine Gold, or of Silver, and of the Alloy which ought to be

DENOMINATION.	Fineness.	Seignorage and remedy.	Fine Metal.	Alloy.	Standard Weight.
			Grains.	*Grains.*	
ENGLAND—					
Gold guinea	22 carats	$\frac{22}{24}$ 1-6 carat	$118\frac{8}{11}$	$10\frac{7}{11}$	5 dwt. $9\frac{23}{24}$ grs.
Silver crown	11 oz. 2 dwt.	$\frac{222}{240}$ $3\frac{3}{11}$ grs. fine	$429\frac{1}{11}$	$34\frac{10}{11}$	19 " $8\frac{1}{11}$ "
New Coins:					
Gold sovereign	22 carats	$\frac{22}{24}$ 1-6 of a carat	113	$10\frac{1}{4}$	5 " $3\frac{1}{4}$ "
Silver shilling	11 oz. 2 dwt.	$\frac{222}{240}$ { 2 dwts. per lb / 4s. p. lb. seignorage }	$80\frac{8}{11}$	$6\frac{6}{11}$	3 " $15\frac{3}{11}$ "
FRANCE—					
Gold Louis	900 milliemes	$\frac{900}{1000}$ $\frac{1}{100}$ in wt. $\frac{1}{333}$ alloy	$89\frac{9}{10}$	$9\frac{99}{100}$	4 " $3\frac{56}{100}$ "
Silver 5 franc piece	900 milliemes	$\frac{900}{1000}$ $\frac{1}{200}$ in wt. $\frac{1}{143}$ alloy	$347\frac{7}{10}$	$38\frac{9}{10}$	16 " $2\frac{1}{10}$ "
ANTWERP—					
Gold souverain	22.0¾ carats	$\frac{883/4}{7/4}$ $\frac{1}{215}$ in wt. & $\frac{3}{4}$ gr. fine.	$78\frac{1}{2}$	$7\frac{1}{10}$	3 " $13\frac{3}{4}$ "
Old Coins:					
Silver ducatoon	10 dwt. 11½ grs.	$\frac{251/4}{36/5}$ $\frac{1}{180}$ in wt. & 1 gr. fine.	$446\frac{2}{4}$	$66\frac{3}{4}$	1 oz. 1 dwt. $9\frac{1}{2}$ "
HOLLAND—					
Gold ducat	23 7-12 carats	$\frac{283}{4}$ { Seignorage / $\frac{1}{180}$ wt. & 1 gr. fine. }	53	$\frac{2}{10}$	2 dwt. $5\frac{2}{10}$ "
Old Coins:					
Silver guilder	10 dwt. 22½ grs.	$\frac{262\frac{1}{2}}{25\frac{1}{2}}$ seignorage 1 $\frac{48}{100}$ p. ct.	$146\frac{3}{4}$	$14\frac{1}{4}$	6 " 17 "
NETHERLANDS—					
Gold Williams'	900 milliemes	$\frac{900}{1000}$	$93\frac{1}{2}$	$10\frac{4}{10}$	5 " $3\frac{9}{10}$ "
New Coins:					
Silver guilder	893 milliemes	$\frac{893}{1000}$	$148\frac{1}{2}$	$17\frac{8}{10}$	6 " $22\frac{3}{10}$ "
BREMEN—					
Gold Frederick's	21⅞ carats	$\frac{87}{8}$	$93\frac{4}{10}$	$9\frac{6}{10}$	4 " 7 "
HAMBURGH—					
Gold ducat	23 8-12 carats	$\frac{284}{4}$	$53\frac{1}{10}$	$\frac{3}{4}$	2 " $5\frac{5}{8}$ "
Silver rix dollar	14 loths, 4 grs.	$\frac{256}{32}$	401	50	18 " 19 "
DENMARK—					
Gold ducat	23 2-3 carats	$\frac{23}{24}$	$53\frac{1}{10}$	$\frac{3}{4}$	2 " $5\frac{1}{8}$ "
Silver rix dollar	14 lods	$\frac{14}{16}$	$391\frac{9}{10}$	56	18 " $15\frac{9}{10}$ "
SWEDEN—					
Gold ducat	23 5-12 carats	$\frac{281}{2}$ 2 grs. per mark	$52\frac{9}{7}$	$1\frac{2}{7}$	2 " $5\frac{1}{8}$ "
Silver rix dollar	14 lods, 1 gr.	$\frac{257}{32}$ $\frac{1}{8}$ of a lod	$396\frac{4}{8}$	$54\frac{1}{12}$	18 " $19\frac{3}{8}$ "

TABLE AA—Continued.

contained in the Coins of the following Nations, according to the result of assays of those Coins.

Value where issued.	Value in Dollars and Cents.	Standard Gold to Silver.	Fine Gold to Silver.	ASSAYS.		
				London Mint.		Philadelphia Mint.
				Better or worse than Standard.	Fine Metal.	Fine Metal.
21 shillings	4 79 4/10	1 to 15 37/100	1 to 15 1/2			118.02 to 118.65 grs.
5 "	1 15 1/2					429.7 grs.
20 "	4 56 56/100					112.52 to 113 grs.
1 "	21 3/4	1 to 14 432/1000	1 to 14.287			
20 francs	3 62			W. 0.1 1/2 grs.	89.5 grains	89.43 grs.
5 "	93 8/10	1 to 15 1/2	1 to 15 1/2	W. 7 dwt.	344.9 "	345.06 to 346 grs.
8 florins, 2 st. of ex.	3 17 1/7			W. 0.0 1/2 gr.	78.6 "	
3 " 1 "	1 20 1/2	1 to 16	1 to 15	W. 14 dwt.	445.5 "	
106 stivers	2 14 1/2			B. 1.2 1/2 grs.	52.8 "	52.5 grs.
20 "	39 1/2	1 to 15 8/10	1 to 14 7/10	W. 4 1/2 dwt.	145.1 "	
10 guilders	3 77 1/2					
1 "	40	1 to 16	1 to 15 1/2			
5 rix dollars	3 77			W. 0.2 grs.	92.2 "	
6 marks banco	2 14 1/2			B. 1.2 1/2 grs.	52.9 "	
3 "	1 08	1 to 16 1/2	1 to 15 1/10	W. 10 dwt.	397.5 "	
14 marks, 12 sh.	2 14 1/2			B. 1.2 grs.	52.6 "	
7 " 6 sh.	1 5 1/2	1 to 16 1/2	1 to 14 1/2	W. 13 dwt.	388.4 "	
9 1/2 skillings	2 11 1/2			B. 1.2 grs.	51.9 "	
48 "	1 6 1/2	1 to 16 1/2	1 to 14 1/2	W. 14 1/2 dwt.	388.6 "	

TABLE AA—Continued.

DENOMINATION.	Fineness.	Seignorage and remedy.	Fine Metal.	Alloy.	Standard Weight.
			Grains.	*Grains.*	
RUSSIA—					
Gold imperial	23 5-8 carats	$\frac{188}{192}$	$185\frac{1}{4}$	3	7 to 20½ "
Silver rouble	10 oz. 8 dwt.	$\frac{203}{254}$	$277\frac{1}{3}$	$42\frac{3}{4}$	13 " 8¼ "
VIENNA & TRIESTE—					
Gold ducat	23 2-3 carats	$\frac{7}{8}$	$53\frac{1}{16}$	$\frac{3}{4}$	2 " 5⅝ "
Silver rix dollar	13 loths, 6 grs.	$\frac{244}{488}$	361	72	18 " 1 "
LEGHORN—					
Gold Rusponi	23 7-8 carats	$\frac{191}{192}$	$160\frac{3}{4}$	$\frac{5}{8}$	6 " 17½ "
Silver Franciscone	10 oz. 18 1-3 dwt.	$\frac{955}{958}$	$387\frac{1}{2}$	$38\frac{1}{2}$	17 " 18 "
PORTUGAL & BRAZIL—					
Gold ½ Johannes	22 carats	$\frac{2}{3}$	203	$18\frac{3}{4}$	9 " 5⅝ "
Silver new crusado*	10 dinheiros, 19 grs.	$\frac{255}{288}$ $\frac{1}{32}$ to $\frac{3}{32}$	239	$26\frac{5}{8}$	11 " 1⅛ "
SPAIN & FORMER COLONIES					
Gold doubloon†	21 carats	$\frac{21}{24}$ $\frac{1}{16}$ of a carat	$366\frac{1}{4}$	$52\frac{1}{2}$	17 " 10½ "
Silver dollar	$10\frac{1}{2}$ dinheiros	$\frac{43}{48}$ 1 grain fine	$374\frac{1}{2}$	$43\frac{3}{8}$	17 " 10½ "
UNITED STATES—					
Gold eagle	22 carats	$\frac{22}{24}$	$247\frac{1}{2}$	$22\frac{1}{2}$	11 " 6 "
Silver dollar			$371\frac{1}{4}$	$44\frac{1}{2}$	17 " 8 "

* This is the crusado of 1690: the latest crusado weighs 108.2 of pure silver, and is worth 480 reas; hence one milrea is worth 111.222 cents—*Secretary of the Treasury.*

† The doubloon is worth in Peru 17 dollars—export duty, gold 2 per cent. silver, 5 per cent—Dollars at a premium of 2 to 3 per cent.

Do. do. Chili 17¼ dollars—dollars 103⅛ cents each.

Do. do. Havana 17 dollars—export duty, gold 1 per cent. silver, 2 per cent.

Do. do. Mexico 16 dollars—export duty, gold 2 per cent. silver, 3½ per ct.

Authorities: Doctor Kelly. Mr. Tate. Mint Reports.

TABLE AA—Continued.

Value where issued.	Value in Dollars and Cents.	Standard Gold to Silver.	Fine Gold to Silver.	ASSAYS.		
				London Mint.		Philadelphia Mint.
				Better or worse than Standard.	Fine Metal.	Fine Metal.
10 roubles	7 48½	1 to 17	1 to 15	B. 1. 2½ grs...	181. 9 grains.	
1 "	74¾			W. 13 dwt.....	273. 0 "	
4½ florins	2 14¼	1 to 18	1 to 15$\frac{3}{10}$	B. 1. 2¾ grs ..	53. 2 "	
2 "	97¼			W. 1 oz. 5 dwt.	355. 5 "	
40 lire	6 49	1 to 15⅝	1 to 14½	B. 1. 3¾ grs...	160. 8 "	
6⅝ lire	1 04⅜			W. 2 dwt.....	386. 4 "	
6.400 reas	8 20	1 to 16	1 to 15$\frac{7}{10}$	W. 0. 0½ gr....	201. 8 "	202. 8 to 203. 2 grs.
480 "	64⅜			W. 7 dwt.....	237. 5 "	
16 dollars	14 79	1 to 16	1 to 16⅜	W. 1. 1 gr	360. 0 "	361. 8 to 362. 4 grs.
1 "	1 01			W. 8 dwt.....	370. 9 "	372. 6 to 374 grs.
	10 00	1 to 15⅝	1 to 15	W. 0. 0½ grs ..	246. 0 "	
	1 00			W. 8½ to 10½ dwt.	368. 3 to 370 grs.	

TABLE BB. No. 1.

STATEMENT of the rate of Exchange which has prevailed in Baltimore for Bills on London, from 1791 *till* 1820, *compiled chiefly from actual sales effected by two highly respectable Mercantile Houses.*

	1791.		1792.		1793.		1794.		1795.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	2 prem.	4. 53⅜	Par	4. 44½	4 disc't	4. 26⅝	5 prem.	4. 66⅝	6 prem.	4. 71⅛
February	2 do	4. 53⅜	2 prem.	4. 53⅜	2½ do	4. 33⅜	6 do	4. 71⅛	3 do	4. 57⅛
March	1 do	4. 48⅝	Par	4. 44½	Par	4. 44½	4½ do	4. 64½	Par	4. 44½
April	2 do	4. 59⅜	1 disc'nt	4. 40	Par	4. 44½	4½ do	4. 64½	Par	4. 44½
May	2 do	4. 53⅜	1 do	4. 40	Par	4. 44½	6 do	4. 71⅛	2 prem.	4. 53⅜
June	2½ do	4. 55⅝	Par	4. 44½	Par	4. 44½	5 do	4. 66⅝	5 do	4. 66⅝
July	3 do	4. 57⅜	Par	4. 44½	2 prem.	4. 53⅜	8 do	4. 80	3 do	4. 57⅛
August	2½ do	4. 55⅝	1 prem.	4. 48⅝	3 do	4. 57⅛	8 do	4. 80	Par	4. 44½
September	3½ do	4. 60	2 do	4. 53⅜	5 do	4. 66⅝	8 do	4. 80	2 prem.	4. 53⅜
October	2½ do	4. 55⅝	2 do	4. 53⅜	2 do	4. 53⅜	8 do	4. 80	1 do	4. 48⅝
November	3 do	4. 57⅛	2 do	4. 53⅜	4 do	4. 62⅜	8 do	4. 80	Par	4. 44½
December	1 do	4. 48⅝	4 disc'nt	4. 26⅝	5 do	4. 66⅝	8 do	4. 80	3 disc't	4. 31⅛
Mean price		4. 54½		4. 45½		4. 50		4. 73¾		4. 51½

Authorities—Two respectable Mercantile Houses.

TABLE BB. No. 1—Continued.

	1796.		1797.		1798.		1799.		1800.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	11 dis'ct	3.95⅝	Par	4.44⅜	Par	4.44⅜	4 disc'nt	4.26⅜	2 disc'nt	4.35⅝
February	10 do	4.00	Par	4.44⅜	Par	4.44⅜	Par	4.44⅜	Par	4.44⅜
March	5 do	4.22⅜	Par	4.44⅜	Par	4.44⅜	Par	4.44⅜	2 prem.	4.53⅜
April	5 do	4.26⅝	Par	4.44⅜	Par	4.44⅜	10 disc't	4.00	2 do	4.53⅜
May	4 do	4.26⅜	Par	4.44⅜	Par	4.44⅜	10 do	4.00	3 do	4.57⅞
June	3 do	4.31⅛	2 disc'nt	4.35⅝	Par	4.44⅜	10 do	4.00	3 do	4.57⅞
July	2½ do	4.33⅞	Par	4.44⅜	2 disc'nt	4.35⅝	10 do	4.00	3 do	4.57⅞
August	2 do	4.35⅝	Par	4.44⅜	4 do	4.26⅝	10 do	4.00	3 do	4.57⅞
September	2 do	4.35⅝	3 disc'nt	4.31⅛	Par	4.44⅜	10 do	4.00	2 do	4.53⅜
October	2 do	4.35⅝	Par	4.44⅜	4 disc'nt	4.26⅝	10 do	4.00	Par	4.44⅜
November	Par	4.44⅜	Par	4.44⅜	4 do	4.26⅝	10 do	4.00	4 prem.	4.62⅝
December	Par	4.44⅜	Par	4.44⅜	4 do	4.26⅝	3 do	4.31⅛	5 do	4.66⅝
Mean price		4.27½		4.42⅜		4.37¾		4.12¼		4.53¾

TABLE BB. No. 1—Continued.

	1801.		1802.		1803.		1804.		1805.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	2 prem.	4. 53⅜	1 disc'nt	4. 40	Par	4. 44⅛	3 prem.	4. 57⅞	Par	4. 44⅛
February	4 disc'nt	4. 26⅜	1 do	4. 40	Par	4. 44⅛	3 do	4. 57⅞	1 disc'nt	4. 40
March	4 do	4. 26⅜	1 do	4. 40	1 prem.	4. 48⅜	2 do	4. 53⅜	2 do	4. 35⅝
April	4 do	4. 26⅜	1 do	4. 40	2 do	4. 53⅜	3½ do	4. 60	1½ do	4. 37½
May	Par	4. 44⅛	1 do	4. 40	Par	4. 44⅛	3 do	4. 57⅞	2 do	4. 35⅝
June	4 disc'nt	4. 26⅜	2 prem.	4. 53⅜	2 prem.	4. 53⅜	2 do	4. 53⅜	5 do	4. 22⅝
July	3 do	4. 31½	3½ do	4. 60	3 do	4. 57⅞	2½ do	4. 55⅝	5 do	4. 22⅝
August	3 do	4. 31½	2 do	4. 53⅜	3½ do	4. 60	2 do	4. 53⅜	5 do	4. 22⅝
September	Par	4. 44⅛	1½ do	4. 51½	3½ do	4. 60	2 do	4. 53⅜	2½ do	4. 33⅜
October	Par	4. 44⅛	Par	4. 44⅛	3½ do	4. 60	2 do	4. 53⅜	2 do	4. 35⅝
November	Par	4. 44⅛	2 prem.	4. 53⅜	2 do	4. 53⅜	1 do	4. 48⅜	1 do	4. 40
December	Par	4. 44⅛	2 do	4. 53⅜	2½ do	4. 55⅝	Par	4. 44⅛	2 do	4. 35⅝
Mean price		4. 37		4. 47½		4. 53		4. 54		4. 33½

TABLE BB.—No. 1—Continued.

	1806.		1807.		1808.		1809.		1810.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	1 disc'nt	4.40	1 disc'nt	4.40	Par	4.44⅛	8 prem.	4.80	2 disc'nt	4.35⅝
February	1 do	4.40	1 do	4.40	Par	4.44⅜	8 do	4.80	3 do	4.31⅛
March	2 do	4.35⅝	1 do	4.40	Par	4.44⅛	4 do	4.62½	4 do	4.26⅜
April	1 do	4.40	1 do	4.40	2 prem.	4.53⅜	1 do	4.48⅞	4 do	4.26⅝
May	1 do	4.40	2 do	4.35⅝	5 do	4.66⅝	Par	4.44⅛	4 do	4.26⅜
June	Par	4.44⅜	2 do	4.35⅝	5 do	4.66⅝	Par	4.44⅛	4 do	4.26⅜
July	Par	4.44⅛	Par	4.44⅜	5 do	4.66⅝	1 prem.	4.48⅞	3 do	4.31⅛
August	Par	4.44⅛	Par	4.44⅜	5 do	4.66⅝	1 do	4.48⅞	2 do	4.37½
September	Par	4.44⅜	Par	4.44⅜	5 do	4.66⅝	3½ do	4.60	3 do	4.31⅛
October	Par	4.44⅛	Par	4.44⅛	5 do	4.66⅝	3½ do	4.60	4 do	4.26⅜
November	Par	4.44⅛	Par	4.44⅜	6 do	4.71⅛	2 do	4.53⅜	4 do	4.26⅜
December	Par	4.44⅛	Par	4.44⅜	8 do	4.80	Par	4.44⅛	5 do	4.22⅜
Mean price		4.42¼		4.41⅛		4.61½		4.56¼		4.29

TABLE BB. No. 1—Continued.

	1811.		1812.		1813.		1814.		1815.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	10 disc't	4.00	17 disc't	3.68 3/4	17 disc't	3.68 3/4	10 disc't	4.00	4 prem.	4.62 3/4
February	10 do	4.00	17 do	3.68 3/4	18 do	3.64 1/4	9 do	4.04 1/4	2 do	4.53 3/4
March	10 do	4.00	19 do	3.60	17 do	3.68 3/4	8 do	4.08 3/4	Par	4.44 1/4
April	13 do	3.86 3/4	21 do	3.51 1/4	15 do	3.77 1/4	3 do	4.31 1/4	3 prem.	4.57 1/4
May	13 do	3.86 3/4	20 do	3.55	16 do	3.73 3/4	3 do	4.31 1/4	7 do	4.75
June	13 do	3.86 3/4	20 do	3.55	17 do	3.68 3/4	5 do	4.22 3/4	10 do	4.88 3/4
July	14 do	3.82 3/4	20 do	3.55	17 do	3.68 3/4	8 do	4.08 3/4	11 do	4.93 3/4
August	17 do	3.68 3/4	20 do	3.55	16 do	3.73 3/4	11 do	3.95 3/4	13 do	5.02 3/4
September	19 do	3.60	20 do	3.55	16 do	3.73 3/4	5 do	4.22 3/4	15 do	5.11 1/4
October	19 do	3.60	17 do	3.68 3/4	15 do	3.77 1/4	Par	4.44 1/4	19 do	5.28 3/4
November	18 do	3.64 1/4	17 do	3.68 3/4	14 do	3.82 1/4	Par	4.44 1/4	19 do	5.28 3/4
December	16 do	3.73 3/4	18 do	3.64 1/4	12 do	3.91 1/4	4 prem.	4.62 3/4	18 do	5.24 3/4
Mean price		3.80 1/4		3.60 3/4		3.74		4.23		4.89 1/4

TABLE BB. No. 1—Continued.

	1816.		1817.		1818.		1819.		1820.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	15 prem.	5.11⅛	6 prem.	4.71⅛	3 prem.	4.57⅞	1 disc'nt	4.40	1 prem.	4.48⅝
February	16 do	5.15⅝	4½ do	4.64⅜	3 do	4.57⅞	Par	4.44⅛	1 do	4.48⅝
March	19 do	5.28⅝	4½ do	4.64⅜	2 do	4.53⅜	Par	4.44⅛	½ do	4.46⅝
April	19⅛ do	5.31⅛	4 do	4.62⅝	1½ do	4.51⅛	1 prem.	4.48⅝	Par	4.44⅛
May	20 do	5.33⅜	2½ do	4.55⅝	Par	4.44⅛	3 do	4.57⅞	Par	4.44⅛
June	22½ do	5.44⅛	2 do	4.53⅜	1 prem.	4.48⅝	1 do	4.48⅝	Par	4.44⅛
July	19 do	5.28⅝	2 do	4.53⅜	1 do	4.48⅝	Par	4.44⅛	2½ prem.	4.55⅝
August	17 do	5.20	2 do	4.53⅜	½ do	4.46⅜	1 prem.	4.48⅝	2 do	4.53⅜
September	18 do	5.24⅛	3 do	4.57⅞	½ do	4.46⅜	2½ do	4.55⅝	2½ do	4.55⅝
October	17 do	5.20	3 do	4.57⅞	1 do	4.48⅜	2½ do	4.55⅝	2½ do	4.55⅝
November	14 do	5.06⅜	3 do	4.57⅞	½ disc'nt	4.42⅜	3 do	4.57⅞	3 do	4.57⅞
December	10 do	4.88⅜	3 do	4.57⅞	1 do	4.40	2½ do	4.55⅝	3 do	4.57⅞
Mean price		5.21		4.59		4.49		4.50		4.51

TABLE BB. No. 1—Continued.

	1821.		1822.		1823.		1824.		1825.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	3½ prem.	4.60	12 prem.	4.97⅞	12½ prem.	5.00	8 prem.	4.80	10 prem.	4.88⅜
February	4½ do	4.64⅜	13½ do	5.04⅜	11 do	4.93⅜	8½ do	4.82⅜	9½ do	4.86⅜
March	5 do	4.66⅜	13½ do	5.04⅜	9 do	4.84⅜	9 do	4.84⅜	9½ do	4.86⅜
April	7½ do	4.77⅛	13½ do	5.04⅜	6 do	4.71⅛	9 do	4.84⅜	9 do	4.84⅜
May	8½ do	4.82⅜	11 do	4.93⅜	5 do	4.66⅜	9 do	4.84⅜	7 do	4.77⅛
June	10 do	4.88⅝	9 do	4.84⅜	6 do	4.71⅛	9½ do	4.86⅜	5½ do	4.68⅝
July	9½ do	4.86⅜	9½ do	4.86⅜	7 do	4.75⅝	9½ do	4.86⅜	6 do	4.71⅛
August	9 do	4.84⅜	10½ do	4.91⅛	8 do	4.80	9 do	4.84⅜	5½ do	4.68⅝
September	9 do	4.84⅜	11½ do	4.95⅝	7 do	4.75⅝	9 do	4.84⅜	8 do	4.80
October	9½ do	4.86⅜	12½ do	5.00	8 do	4.80	10 do	4.88⅛	10 do	4.88⅛
November	10½ do	4.91⅛	13 do	5.02⅜	7½ do	4.77⅞	9½ do	4.86⅜	9½ do	4.86⅜
December	12 do	4.97⅛	12½ do	5.00	8 do	4.80	9½ do	4.86⅜	9 do	4.84⅜
Mean price		4.81		4.97		4.80		4.85		4.81

TABLE BB. No. 1—Continued.

	1826.		1827.		1828.		1829.	
	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.	Per cent.	Dollars.
January	8 prem.	4.80	11⅛ prem.	4.95⅝	10⅛ prem.	4.91⅛	8½ prem.	4.82⅜
February	8½ do	4.82⅜	10⅜ do	4.91⅛	10⅜ do	4.91⅛	9 do	4.94⅛
March	8⅜ do	4.82⅜	10⅜ do	4.91⅛	11 do	4.93⅜	9 do	4.84⅛
April	9 do	4.84⅛	10⅛ do	4.91⅛	11 do	4.93⅜	8 do	4.80
May	9½ do	4.86⅜	10⅜ do	4.91⅛	10½ do	4.91⅛	9½ do	4.86⅜
June	9½ do	4.86⅜	10½ do	4.91⅛	11 do	4.93⅜	9 do	4.84⅛
July	10 do	4.88⅜	10 do	4.88⅜	10⅜ do	4.91⅛	9 do	4.84⅛
August	11 do	4.93⅜	10⅛ do	4.91⅛	10 do	4.88⅜	9½ do	4.86⅜
September	12 do	4.97⅛	11 do	4.93⅜	11 do	4.93⅜	9½ do	4.86⅜
October	12 do	4.97⅛	11 do	4.93⅜	11 do	4.93⅜	9 do	4.86⅜
November	11½ do	4.95⅜	11 do	4.93⅜	10⅛ do	4.91⅛	.....	.....
December	12 do	4.97⅛	11 do	4.93⅜	9½ do	4.86⅜	.....	.....
Mean price	.....	4.89½	.....	4.92	.....	4.91½	.....	4.84⅛

TABLE BB, No. 1—Continued.

	On nominal par.	On real par.
Average rate of exchange on London from 1791 till suspension of specie payments by Bank of England, 6 years	4.50 = $1\frac{1}{4}$ per ct. prem.	or $1\frac{43}{100}$ per ct. discount.
Ditto from 1797 till 1807, 11 years	4.41$\frac{3}{4}$ = $\frac{5}{8}$ per ct. disc'nt	or $3\frac{23}{100}$ per ct. discount.
Ditto during embargo, 1 year and 3 months	4.64 = $4\frac{1}{4}$ per ct. prem.	or $1\frac{65}{100}$ per ct. prem.
From embargo till September, 1814, 5 years and 6 months	4.00 = 10 per ct. discount	or $12\frac{1}{4}$ per cent. disc't.
During suspension of specie payments, 2 years and 6 months	4.96 = $11\frac{6}{10}$ per ct. prem.	or $8\frac{2}{3}$ per cent. prem.
From suspension of specie payments till 1820, 3 year and 9 months	4.50 = $1\frac{1}{4}$ per cent. prem.	or $1\frac{43}{100}$ per cent. disc't.
From 1821 till November, 1829, 8 years and 10 months	4.87 = $9\frac{3}{8}$ per cent. prem.	or $6\frac{7}{10}$ per cent. prem.

TABLE BB—No. 2.

RATE OF EXCHANGE at Baltimore, for Bills on Amsterdam, Hamburgh, Bremen, and Paris, from 1815 *till* 1829.

YEAR.	Amsterdam. Cents per Guilder.	Hamburgh. Cents per Mark Banco.	Bremen. Cents per Rix Dollar.	Paris. Cents per Franc, or Francs per Dollar.
1815	45 to 50	38 to 40	85 to 88	21 to 22
1816	45 " 48	38 " 41	84 " 88	21 " 22
1817	42 " 39	36 " 34	80 " 77	21 " 18¾
1818	39½ " 40	35 " 36	76 " 77	18¾ " 19
1819	39 " 41	34 " 35	75 " 77	18½ " 19
1820	37½ " 39	33⅓ " 34	74 " 75	18½ " 18¾
1821	38 " 40	33 " 35	75 " 77	18¾ " 19
1822	39 " 40½	33½ " 35	78 " 79	19 " 19½
1823	39 " 41	34 " 36	76 " 78	18¾ " 19
				francs.
1824	38½ " 41	34 " 35	77 " 78½	5.20 to 5.30
1825	40 " 41	35 " 36	80 " 82	5.20 " 5.25
1826	39 " 40	33 " 35	78 " 79	5.25 " 5.30
1827	40 " 41	34 " 36	78 " 80	5.17 " 5.25
1828	40 " 41	34 " 36	79 " 80	5.18 " 5.22
1829	40 " 41	34½ " 36	78½ " 80	5.20 " 5.25

Authorities—An Exchange Broker. Price-Current.

TABLE BB—No. 3.

STATEMENT of the current rate of Exchange in London for Bills on Hamburgh, from 1760 *till* 1829, *and for Bills on Amsterdam and on Paris, since* 1805.

Year.	Hamburgh par is 34*s.* 3*d.* Flemish Banco in Gold, 34*s.* $1\frac{4}{76}$ *d.* do. by Assay, 35*s.* 1*d.* Banco in Silver per Pound Sterling.	Year.	Hamburgh, continued.	Year.	Hamburgh, continued.	Amsterdam par 35*s.* $11\frac{8}{76}$*d.* Banco in Gold, 35*s.* $10\frac{1}{2}$*d.* do. by Assay, 36*s.* $7\frac{1}{2}$*d.* Banco in Silver per Pound Sterling.	Paris par 25*s.* $\frac{25}{765}$ Francs in Gold, 25*s.* $\frac{24}{765}$ do. by Assay, 24*s.* $\frac{73}{765}$ do. in Silver per Pound Sterling.
	s. d.		*s. d.*		*s. d.*	*s. d.*	*francs. francs.*
1760	31 8 to 36 4	1783	31 6 to 32 9	1806	33 3 to 34 5	35 4 to 36 0	25. to 25.50
1	31 11 " 32 5	4	33 6 " 34 8	7	34 3 " 34 10	36 0 " 36 6	24.14 " 24.50
2	32 11 " 35 1	5	34 11 " 35 6	8	32 9 " 35 8	34 7 " 35 7	23.8 " 24.4
3	33 11 " 34 11	6	34 3 " 34 11	9	28 6 " 31 3	31 4 " 36 1	19.16 " 22.4
4	34 5 " 35 2	7	34 5 " 35 1	1810	29 3 " 31 1	31 6 " 32 0	19.16 " 21.
5	34 4 " 35 1	8	34 9 " 35 4	11	23 6 " 26 6	29	18. " 19.
6	34 6 " 35 8	9	34 10 " 35 7	12			
7	35 6 " 35 11	1790	35 0 " 35 7	13			
8	33 6 " 34 11	1	35 2 " 35 11	14	29 0 " 29 6		21. " 22.
9	33 1 " 33 8	2	34 0 " 34 6	15	28 2 " 32 2	30 4 " 34 4	18.30 " 23.80
1770	33 2 " 33 5	3	35 3 " 37 6	16	35 2 " 36 7	38 6 " 40 0	25.10 " 25.70
1	32 9 " 33 9	4	34 5 " 36 7	17	35 2 " 36 2	38 4 " 39 4	24.70 " 25.20
						guilder. guilder.	
2	32 7 " 33 8	5	32 6 " 35 10	18	33 11 " 34 6	11.2 " 11.10	24. " 24.40
3	34 0 " 34 11	6	32 7 " 34 7	19	33 11 " 36 2	11.6 " 11.9	23.85 " 25.10
4	34 2 " 34 10	7	34 9 " 38 0	1820	36 7 " 37 7	12. " 12.7	25.45 " 25.80
5	34 2 " 34 5	8	37 5 " 38 2	21	37 6 " 38 2	12.3 " 12.9	25.60 " 26.10
6	33 1 " 34 1	9	32 6 " 37 7	22	37 7 " 38 0	12.7 " 12.8	25.30 " 25.60
7	32 1 " 33 2	1800	31 4 " 32 6	23	38 0 " 38 4	12.9 " 12.10	25.90 " 26.10
8	32 4 " 34 10	1	29 8 " 32 6	24	37 7 " 37 8	12.2 " 12.3	25.30 " 25.70
9	33 9 " 35 10	2	32 2 " 33 5	25	36 9 " 36 10	12.2 " 12.2	25.30 " 25.50
1780	33 10 " 35 7	3	32 10 " 34 5	26	37 4 " 37 7	12.8 " 12.8	25.65 " 25.95
1	31 11 " 34 1	4	34 10 " 35 10	27	36 10 " 37 6	12.3 " 12.7	25.35 " 25.85
2	31 8 " 32 11	5	32 9 " 35 8	28	36 10 " 37 6	12.3 " 12.7	25.35 " 25.85
				29	36 7 " 36 10	12.1 " 12.3	25.40 " 25.50

REMARKS.

1795, War and bad harvest.
1799, 1800, and 1801, Two bad harvests.
1802 to 1808, Little affected by war, and exchange generally favorable.
1808 to 1814, 8, 10, 12, 15, 25, and 30 per cent. against England.
1815, After peace only 5 per cent. against England.
1816, At par.
1817 and 1818, Large importations of grain.
1819 to 1829, Exchanges favorable to England.

Authorities. Mr. Mushet. Monthly Magazine. Rates at Lloyd's.

TABLE CC.

EXPENSES on shipments of Coin or Bullion to England and to France, according to actual sales.

Upon gold to London.

Freight, ⅛ per cent.; insurance, ⅝ per cent	1.13 per ct.
Commission, brokerage, melting, and assaying	.31 do
Loss when sold at £3 17*s.* 6*d.* sterling, per ounce, which has been the price, until recently, that it has risen to £3 17*s.* 9*d.* sterling	.50 do
	1.94 per ct.
Deduct 60 days interest, at 4 per cent. per annum	.67 do
Expense on light British gold, when compared with a bill on London, at 60 days	1.27 per ct.
There is alleged to be an inferiority from the British standard, in the fineness of Portuguese and American gold, of ¼ of a grain in 22 carats, and usually a trifling loss in weight, in all equal to	.33 do
	1.60 per ct.
Doubloons, generally, have commanded an advance on the price of bullion, but, if melted, the additional loss, from an inferiority of one grain in 21 carats, would be	.90 do
	2.50 per ct.

The average premium paid for gold, since 1821, has been 4¼ to 5 per cent. on the mint prices.

Upon silver coin to London.

Mexican or other dollars, of full weight, freight and insurance as above	1.13 per ct.
Commission, brokerage, and other charges	.37 do
	1.50 per ct.
Allowing 24 days to effect sales, there will be a gain of 36 days' interest, at 4 per cent. per annum	.40 do
Expenses	1.10 per ct.
When sales are made at 4*s.* 9¼*d.* sterling, per ounce, which was about the average price last year, the loss upon our nominal estimate of 4*s.* 6*d.* sterling, per dollar, will be	7.90 do
Equal to the remittance of a bill on London, at 60 days, at a premium of	9 per ct.

Our half dollars produced about ¼ per cent. less in London; but, on the other hand, the Mexican and other new dollars cost from ¼ to 1¼ per cent. premium.

The last quotation from London is but 4*s.* 9½*d.* sterling, per ounce, for dollars, which would increase the item of loss from $7\frac{8}{10}$ per cent. to $9\frac{1}{10}$ per cent.; and, it is worthy of remark, that silver in England, being a commercial commodity, subject to fluctuation in price, it will not readily exported, unless with the prospect of a reasonable profit.

Expense on shipments of silver coin to Havre.

American half dollars; freight, 50 cts.; insurance, 62½ cts		1.13 per ct.
Commission, brokerage, and other charges		.67 do
		1.80 per ct.
Allowing 24 days to effect sales, there will be a gain of 36 days' interest, at 5 per cent. per annum		.50 do
Expenses		1.30 per ct.
Sales were made last year, at an average of about francs,	5.25½	
Par value	5.34½	
Loss on sales	9 cts.	1.75 do
Equivalent to a bill on Paris, at 60 days, at 5.19 francs per dollar		3.05 per ct.
Expenses as above		1.30 per ct.
Mexican and other new dollars have sold, on an average, at 5.31¼ francs, each, loss thereupon		.80 do
Equal to a bill remittance at 5.23¾ francs per dollar		2.10 per ct.

The latest quotation of prices from Havre—

For American half dollars, is 5.23 francs.
For Mexican dollars 5.29 do

Authorities—

One of the most extensive exporters of gold and silver to England, in 1827 and 1828.

A large shipper of dollars and half dollars to Havre, during the same period.

TABLE DD.

STATEMENT of the price of specie, during the suspension of specie payments, payable in Baltimore and New York Bank notes; and, also, a comparative view of the exchange for bills on London, in the cities of Baltimore, Philadelphia, and New York, and also in Boston, where specie was paid.

	PRICE OF SPECIE.		Baltimore rate of exchange on London.	Philadelphia rate of exchange on London.	New York rate of exchange on London.	Boston rate of exchange on London.
	Baltimore premium.	New York premium.				
1814.			per cent.	per cent.	per cent.	per cent.
September	20 per ct.	....	5 disc't	4 disc't	7 disc't	12 disc't
October	15 do	.....	par	3 do	3 do	13 do
November	10 do	.....	par	par	par	13 do
December	14 do	.....	4 prem.	2¼ prem.	par	14 do
1815.						
January	20 do	15 per ct.	4 do	2½ do	1 prem.	14 do
February	5 do	2 do	2 do	par	1 disc't	10 do
March	5 do	5 do	par disc't	2½ disc't	5 do	9 do
April	10 do	5½ do	3 prem.	1½ prem.	4 do	8 do
May	14 do	5 do	7 do	5¼ do	1 do	5½ do
June	16 do	11½ do	10 do	6⅓ do	1 prem.	10 do
July	20 do	14 do	11 do	7 do	1 do	12 do
August	19 do	12½ do	13 do	7 do	3 do	9 do
September	20 do	13 do	15 do	17 do	11 do	3 do
October	21½ do	16 do	19 do	18 do	12 do	2 do
November	15 do	12 do	19 do	13 do	10 do	4 do
December	18 do	12½ do	18 do	12 do	8 do	2½ do
1816.						
January	15 do	12¼ do	15 do	12 do	8 do	2 do
February	13 do	9 do	16 do	12 do	6½ do	par
March	18 do	12½ do	19 do	15 do	9 do	3 prem.
April	23 do	10½ do	19⅛ do	15 do	9½ do	3½ do
May	20 do	12½ do	20 do	16 do	9⅛ do	par
June	20 do	12½ do	22½ do	19 do	8½ do	2 disc't
July	15 do	6 do	19 do	17 do	5 do	par
August	12 do	5 do	17 do	14 do	4 do	½ prem.
September	10 do	3 do	18 do	15 do	6 do	3 do
October	8 do	2 do	17 do	14 do	6 do	4½ do
November	9 do	1¾ do	14 do	11 do	6 do	4½ do
December	9 do	2½ do	10 do	6 do	3 do	2½ do
1817.						
January	3 do	2½ do	6 do	4 do	par	par
February	2½ do	2½ do	4½ do	2 do	1 prem.	½ prem.

Authorities:—A New York Broker; a Baltimore Broker; prices current.

TABLE EE.

AN ACCOUNT of the London market price of standard gold and of silver, with their relative proportions to each other, from 1760 *till* 1829, *and the amount of the notes of the Bank of England, in circulation, since* 1782.

YEAR.	Standard gold, per ounce, £3 17s. 10½d.	Standard silver, per ounce, 5s. 2d.	Gold to silver, 15 21/62 to 1.	Bank of England notes in circulation.
	£ s. d.	s. d.		
1760	3 19 0	5 6½	14. 16 to 1	
1	4 0 0	5 9½	13. 81 : 1	
2	3 19 10	5 6	14. 50 : 1	
3	4 0 6	5 6½	14. 58 : 1	
4	3 18 3	5 3½	14. 78 : 1	
5	3 18 0	5 4½	14. 56 : 1	
6	3 19 2	5 6½	14. 28 : 1	
7	3 19 8	5 6¾	14. 32 : 1	
8	3 19 6	5 6	14. 45 : 1	
9	4 0 3	5 7	14. 32 : 1	
1770	4 0 4	5 7¾	14. 22 : 1	
1	3 19 9	5 7¼	14. 23 : 1	
2	4 0 0	5 8¼	14. 06 : 1	
3	3 17 11	5 4	14. 60 : 1	
4	3 17 9	5 2½	14. 92 : 1	
5	3 17 7	5 4½	14. 49 : 1	
6	3 17 7	5 5½	14. 21 : 1	
7	3 17 7	5 6½	13. 91 : 1	
8	3 17 7	5 5½	14. 21 : 1	
9	3 17 6	5 3	14. 76 : 1	
1780	3 17 6	5 5	14. 30 : 1	
1	3 17 6	5 7½	13. 70 : 1	
2	3 17 9	5 9½	13. 42 : 1	7, 575, 605
3	3 18 0	5 8½	13. 66 : 1	6, 552, 597
4	3 17 10½	5 3½	14. 77 : 1	6, 209, 855
5	3 17 10½	5 2	15. 07 : 1	
6	3 17 6	5 3	14. 76 : 1	
7	3 17 6	5 3½	14. 70 : 1	8, 688, 570
8	3 17 6	5 3¾	14. 58 : 1	9, 370, 350
9	3 17 6	5 3	14. 76 : 1	9, 705, 240
1790	3 17 6	5 2½	14. 88 : 1	10, 217, 360
1	3 17 6	5 2¾	14. 82 : 1	11, 699, 140
2	3 17 6	5 5	14. 30 : 1	11, 349, 810
3	3 17 6	5 2¼	14. 88 : 1	11, 451, 180
4	3 17 6	5 1¾	15. 18 : 1	10, 963, 830
5	3 17 6	5 3½	14. 64 : 1	13, 539, 160
6	3 17 6	5 3½	14. 64 : 1	11, 030, 110
7	3 17 10½	5 1	15. 31 : 1	8, 640, 250
8	3 17 10½	5 1	15. 31 : 1	13. 224, 440
9	3 17 9	5 6	14. 14 : 1	14, 006, 960
1800	4 5 0	5 9½	14. 68 : 1	15, 450, 970
1	4 6 0	6 0	14. 33 : 1	16, 365, 206
2	4 3 0	5 6	15. 09 : 1	17, 931, 930
3	4 0 0	5 7	14. 33 : 1	16, 847, 522
4	4 0 0	5 6	14. 54 : 1	17, 345, 020
5	4 0 0	5 4	15. 00 : 1	17, 241, 932
6	4 0 0	5 8	14. 12 : 1	17, 135, 400
7	4 0 0	5 7	14. 33 : 1	17, 405, 001
8	4 0 0	5 5½	14. 66 : 1	17, 644, 670
9	4 10 8	5 8	16. 00 : 1	19, 811, 330
1810	4 12 0	5 9	16. 00 : 1	20. 728, 780
11	5 0 0	6 5	15. 58 : 1	23, 793, 115
12	5 8 0	7 3	14. 09 : 1	23, 482, 910
13	5 8 0	7 6	14. 04 : 1	24, 024, 869
14	5 10 0	7 0	15. 71 : 1	25, 511, 012
15	5 5 0	6 6	16. 15 : 1	27, 155, 824
16	4 0 0	5 11	13. 52 : 1	26, 468, 280
17	3 18 6	5 1	15. 44 : 1	27, 339, 768

TABLE EE.—Continued.

YEAR.	Standard gold, per ounce, £3 17s. 10½d.	Standard silver per ounce, 5s. 2d.	Gold to silver, 15 7/10 to 1.	Bank of England notes in circulation.
	£ s. d.	s. d.		
18	4 1 6	5 4	15.28 : 1	27,954,558
19	4 1 0	5 2	15.68 : 1	25,947,637
1820	3 17 10½	5 0	15.57 : 1	23,875,000
21	3 17 10½	4 11	15.84 : 1	21,759,000
22	3 17 6	4 11	15.77 : 1	18,000,000
23	3 17 6	4 11	15.77 : 1	19,137,000
24	3 17 6	5 0	15.05 : 1	20,616,000
25	3 17 9	5 0	15.55 : 1	19,751,000
26	3 17 6	5 0	15.05 : 1	
27	3 17 6	4 11½	15.63 : 1	
28	3 17 6	4 11½	15.63 : 1	20,000,000
29	3 17 9	4 11	15.81 : 1	18,873,740

Authorities.—Mr. Mushet, Mr. Wheatly, Monthly Magazine, Bullion Report, Mr. Tooke, Mr. Ricardo, Chancellor of the Exchequer, Governor of the Bank.

From 1757 till 1774, (sixteen years) from the defective state of the coin, gold sold, on an average, *above* the Mint price, 1¼ per cent: Mint price, £3 17*s.* 10½*d.* sterling. From the recoinage of 1774 to 1777, till 1799, (twenty six years) the price of gold averaged 7/8 per cent. *under* the Mint price.

From 1757 till 1773, dollars sold at 5*s.* 4¾*d.* per ounce, or 7½ per cent. above the mint price.

From 1773 till 1797, the price of dollars was 5*s.* 1¼*d.* per ounce; equal to 5*s.* 3¼*d.* for standard; being 2 per cent. above the mint price of 5*s.* 2*d.* per ounce, for English standard silver.

In 1773, the Bank of England was prohibited from issuing notes under £20. In 1777 that restriction was removed, and notes were permitted of £10 and of £5.

In 1797, February 25, specie payments were suspended, and the issue was authorized of £2 and of £1 notes. In 1829, April 5, all the banks were required to cease issuing any notes under £5 sterling.

The Duke of Wellington has stated the amount of gold coined in London, from 1822 till 1828, to be 28,000,000 pounds sterling; of which it is estimated that 22,000,000 remain in circulation, together with 6,000,000 silver coins.

Annual average coinage at Calcutta and Madras, 2,000 000 pounds sterling.

[In his paper on "the Relation of Gold and Silver in its variations up to the present time," which is appended to his work on the Production of the Precious Metals, a table from which is reprinted, page 702, Professor Soetbeer has but one authority to which to appeal, and that authority is the above table.

It seems to be not only the first but the only attempt to answer the important questions concerned in the market rate of the metals in the principal commercial city.

This distinguished authority gives the following reasons for not adopting the above table in his publication:

"We have omitted to do this," he says, "because all information was lacking as to what sort of quotations these were, and how these averages were calculated; and further because in any case for the years 1797 to 1817 the Hamburg quotations are more trustworthy on account of the then suspension of specie payments; and finally, because it is evident that gross errors have crept into some of the yearly averages early in this London table, and hence arises a doubt concerning the authenticity of the rest.

"For example: The London table gives for the year 1761 the ratio of 13.94 to 1; that of the following year at 14.63.

"Now it is intrinsically improbable in the highest degree that in the year 1761 the average ratio had sunk below 14 to 1, and that at once in the following year it rose 5 per cent. The careful calculations based on the Hamburg quotations give a ratio of 14.54 for 1761 and 15.27 for 1762.

"Another example: In the London table the average rate from 1781 to 1783 is 13.33, 13.54, 13.78 to 1, which is equivalent to a price of 70¾ to 68½ pence per ounce.

"This is hardly conceivable if we observe the fact that in those years the rate at Hamburg was 14.78, 14.42, 14.48 to 1, while according to the London table itself the ratio in 1784 returned to 14.90.

"In view of this evidence, the above mentioned account of the market rates from 1760 to 1829, reckoned probably by the prices of Silver in London, must be characterized as unfit for use and merely deceptive, in spite of its adoption in official documents."—H.]

TABLE FF—No. 1.

STATEMENT of the quantity of Gold and of Silver, registered, and extracted from the Mines of America, from 1492 *till* 1803.

SPANISH COLONIES.	*Dollars.*
Mexico has furnished to its mint, from 1690 till 1803	1, 353, 452, 000
The mines of Tasco, Zultepec Pachuca, and Zlapujahua, were almost the only mines worked after the destruction of Tenochtitlan in 1521, and from that memorable epoch until 1548. As the quantity of gold and silver, coined at the commencement of the 18th century, did not exceed five millions annually, I reckon, from the conquest by Cortes until 1548, the produce of Mexico at	40, 500, 000
In 1548 commenced the exploring of Zacatecas, and in 1558 that of Guanaxuato, and almost at the same time amalgamation was invented by Medina. One may reckon from 1548 till 1600 at two millions yearly, and from 1600 to 1690 at three millions	374, 000, 000
The mines of Potosi have furnished, from their discovery in 1545 until 1803, 1,095¼ millions, or, 128,882,000 marcs, which leaves, from 1545 to 1556, about	127, 500, 000
From 1556 to 1789, according to the treasury returns	788, 000, 000
Add, for difference in value of dollars from 1556 to 1600	134, 000, 000
Produce from 1789 to 1803	46, 000, 000
The mines of Pasco or Yauricocha, discovered in 1630, have yielded until 1803 nearly three hundred millions, or, 35,300,000 marcs: say from 1630 to 1792, 200,000 marcs yearly	274, 400, 000
From 1792 to 1801, according to the registry	21, 501, 600
Yauricocha, from 1801 to 1803	3, 400, 000
The mines of Gualgayoc, discovered in 1771, have yielded until 1773 per year 170,000 marcs silver	4, 300, 000
From 1774 until 1802 Gualgayoc, Guamachuco, and Conchucos, have yielded	185, 339, 900
Add for 1803	504, 000
Value of the produce of the mines of Huantajaya of Porco and other Peruvian mines less considerable, from the 16th century until 1803, at 150 to 200,000 marcs yearly	350, 000, 000
Choro was settled in 1539; Antiogina was conquered in 1541; the alluvial mines of Sonora and of Chili have been but recently explored. If one reckons 12,000 marcs of gold for the total produce of the Spanish Colonies, exclusive of Mexico, we may add	332, 000, 000
Gold and silver, registered in Spanish Colonies, from 1492 till 1803	$4, 035, 156, 000
Portuguese Colonies.	
Raynal supposes for the first sixty years a produce double of the present period. He admits, according to the register of the Fleets, that from the discovery of the mines of Brazil until 1755 there arrived in Europe of gold to the value of	480, 000, 000
Since 1756 till 1803 we may reckon the annual produce at 32,000 marcs	204, 544, 000
Produce of the Portuguese colonies since the discovery of Brazil	684, 544, 000

Estimate of the Gold and Silver, not registered, extracted from the Mines of America, from 1492 *till* 1803.

He estimates for New Spain, when the illegal extraction was very considerable, until the middle of the 18th century, at one-seventh, or	$260, 000, 000
For Potosi at one-fourth, on account of the enormous smuggling at the early period of exploration	274, 000, 000
Pasco, Gualgayoc, and the rest of Peru, where the silver is near the river Amazon, at one-fourth	200, 000, 000
For the gold of New Grenada and Buenos Ayres at one-fourth	82, 000, 000
Portuguese Colonies.	
For the Gold of Brazil, one-fourth more	171, 000, 000
Gold and silver, not registered, from 1492 to 1803	987, 000, 000

TABLE FF, No. 1—Continued.

Abridged statement of the entire produce of the American Mines, from 1492 *till* 1803.

Political Divisions.		Gold Marcs of Castile.	Silver Marcs of Castile.	Total Dollars.
Spanish Colonies.				
New Spain	$2,028,000,000	3,625,000		493,000,000
Peru and Buenos Ayres	2,410,200,000		512,700,000	4,358,200,000
New Grenada	275,000,000			
Chili	138,000,000			
				4,851,200,000
Portuguese Colonies—Brazil		6,290,000		855,500,000
312 years, annual average 17½ millions		9,915,000	512,700,000	5,706,700,000
The Mint register of Gualgayoc, &c. gives for those 29 years 2,180,470 marcs of silver, which, at 8½ per m. is 18,533,990, which shows an error in Humboldt's computation of			166,805,010	206,700,000
Add proportion smuggled			39,894,990	
Total amount				5,500,000,000

Annual produce of the Mines upon which the duty of $\frac{1}{10}$ *has been paid.*

Provinces.	Fine Gold Marcs.	Fine Silver Marcs.	Value in Dollars.
Mexico	7,000	2,250,000	22,170,740
Peru	3,400	513,000	5,317,988
Chili	10,000	29,700	1,737,380
Buenos Ayres	2,200	414,000	4,212,404
New Grenada	18,000		2,624,760
	40,600 marcs.	3,206,700	36,063,272
Supposed am't of contraband.			
Mexico ..... in silver		800,000	
Peru ..... in silver	100,000	900,000	
Chili ..... in gold	2,500	400,000	
Buenos Ayres ..... in silver	67,000	600,000	
New Grenada ..... in gold	2,500	400,000	3,100,000
Spanish Colonies at the end of the last century			39,163,272

TABLE FF, No. 1—Continued.

Estimated produce of the Mines of America at the commencement of the nineteenth century.

Provinces.	Fine Gold Marcs.	Fine Silver Marcs.	Value in Dollars.
Mexico	7,000	2,338,220	23,000,000
Peru	3,400	611,090	6,240,000
Chili	12,212	29,700	2,060,000
Buenos Ayres	2,200	481,830	4,850,000
New Grenada	20,505	.....	2,990,000
Brazil	29,900	.....	4,360,000
	75,217	3,460,840	43,500,000

Produce of the Mines in Europe, Northern Asia, and America, at the commencement of the present century.

Countries.	Fine Gold. French Marcs.	Fine Silver. French Marcs.	Total amount. Dollars.
Europe	5,300	215,200	2,800,000
Asia	2,200	88,700	1,200,000
America	70,647	3,250,547	44,500,000
	78,147	3,554,447	48,500,000

Authority—Count Humboldt.

TABLE FF, No. 2.

STATEMENT of the annual produce of Gold and Silver, from 1790 *to* 1802, *according to Brogniart's "Traité Elementaire de Mineralogie," and reduced from French Kilogrammes to Marcs of Castile.*

Old Continent.	Gold.		Silver.	
	Marcs.	Dollars.	Marcs.	Dollars.
Asia—Siberia	7,398.4	.....	76,160	.....
Africa	6,528	.....	.....	.....
Europe—Hungary	2,828.8	.....	87,040	.....
Saltzburg	326.4	.....	.....	.....
Austrian States		.....	21,760	.....
Hartz and Hesse		.....	21,760	.....
Saxony		.....	43,520	.....
Norway	326.4	.....	43,520	.....
Sweden		.....		
France		.....	21,760	.....
Spain, &c.		.....		
Total—Old World	17,408	2,367,488	315,520	2,681,920
New Continent.				
N. America, Span. Possess.	5,657.6	3,728,793	2,611,200	32,368,000
S. America, Span. Possess.	21,760		1,196,800	
Portuguese Possessions	32,640	4,439,040	.....	.....
Total—New World	60,057	8,167,833	3,808,000	32,368,000
	77,465	10,535,321	4,123,520	35,049,920
			Gold	10,535,321
General total	.....	.....	.....	45,585,241

Annual average produce of the Quinto do Ouro (King's fifth), collected in the Captain Generalship of Minas Geraes and Minas Novas of Brazil, from 1752 till 1794, from a manuscript, entitled "Rendemiento do Quinto do Ouro das 4 comarcas de Minas Geraes e Novas."

YEARS.	Arrobas.	Marcos.	Ouzas.	Outavas.	Graos.
Annual average from 1752 to 1762	104	7	5	2	20
Do. do. 1763 to 1773	90	3	1	5	33
Do. do. 1774 to 1784	69	20	4	1	60
Do. do. 1785 to 1794	45	41	5	1	22
Do. from the district of Goiazes from 1788 to 1795	8	35	2	3	12
Other districts, equal to ⅛ of Goiazes.					
The arroba of gold of Portuguese standard is worth $8,370.					

Authority—British Parliamentary Report of 1810.

TABLE FF, No. 3.

STATEMENT of the coinage at the Mint of Mexico, from 1804 to 1810, and at the different Mints up to 1825, as furnished by Mr. Ward.

YEARS.	GOLD.	SILVER.	TOTAL.
1804	959, 030	26, 130, 972	27, 090. 002
5	1, 359, 814	25, 806, 074	27, 165, 888
6	1, 352, 348	23, 383, 673	24, 736, 021
7	1, 512, 266	20, 703, 985	22, 216, 251
8	1, 182, 516	20, 502, 434	21, 684, 950
9	1, 464, 818	24, 708, 164	26, 172, 982
10	1, 095, 504	17, 950, 684	19, 046, 188
	8, 926, 296	159, 185, 986	168, 112, 282
1811	1, 085, 364	8, 956, 432	10, 041, 796
12	381, 646	4, 027, 620	4, 409, 266
13		6, 133, 984	6, 133, 984
14	618, 069	6, 902, 481	7, 520, 550
15	486, 464	6, 454, 800	6, 941, 264
16	960, 393	8, 315, 616	9, 276, 009
17	854, 942	7, 994, 951	8, 849, 893
18	533, 921	10, 852, 368	11, 386, 289
19	539, 377	11, 491, 139	12, 030, 516
20	509, 076	9, 897, 078	10, 406, 154
21	303, 504	5, 600, 022	5, 903, 526
22	214, 128	5, 329, 126	5, 543, 254
23	291, 408	3, 276, 414	3, 567, 822
24	236, 944	3, 266, 937	3. 503, 881
25*	2, 385, 455	3, 651, 423	6, 036, 878
	9, 400, 691	102, 150, 391	111, 551, 082
Coinage 1826	603, 971	6, 859, 329	7, 463, 300

*From this sum of 2,385,455 it is necessary to deduct the amount of gold ingots and doubloons imported into Mexico by Goldschmidt, in part payment of the loan	1, 636, 040
And also this sum, imported by the United Mexican Mining Company	300, 000
	1, 936, 040
Leaves the amount of Mexican gold, coined in 1825, only	449, 415

TABLE FF, No. 4.

SUMMARY of the amount of Gold and Silver which has been extracted from the Mines of America from 1492 *till* 1825.

YEARS.	PERIOD.	GOLD. Dollars.	SILVER. Dollars.	TOTAL AMOUNT. Dollars.	MEAN YEAR. Dollars.	GOLD. Castile Marks	SILVER. Castile Marks	GOLD to SILVER.
1492 to 1545	53 years	90, 000, 000	30, 000, 000	120, 000, 000	2, 250, 000	12, 500	66, 600	1 to 5
*a*1546 to 1555	10 do	30, 000, 000	170, 000, 000	200, 000, 000				
1556 to 1570	15 do	40, 000, 000	110, 000, 000	150, 000, 000				
1571 to 1580	10 do	20, 000, 000	70, 000, 000	90, 000, 000	14, 200, 000	20, 000	1, 347, 600	1 to 67
*b*1581 to 1590	10 do	30, 000, 000	140, 000, 000	170, 000, 000				
1591 to 1600	10 do	30, 000, 000	140, 000, 000	170, 000, 000				
1601 to 1610	10 do	25, 000, 000	115, 000, 000	140, 000, 000				
1611 to 1620	10 do	25, 000, 000	115, 000, 000	140, 000, 000				
1621 to 1630	10 do	28, 000, 000	122, 000, 000	150, 000, 000	15, 000, 000	20, 300	1, 440, 000	1 to 70
1631 to 1640	10 do	30, 000, 000	130, 000, 000	160, 000, 000				
1641 to 1650	10 do	30, 000, 000	130, 000, 000	160, 000, 000				
1651 to 1660	10 do	28, 000, 000	122, 000, 000	150, 000, 000				
1661 to 1670	10 do	28, 000, 000	122, 000, 000	150, 000, 000				
1671 to 1680	10 do	28, 000, 000	122, 000, 000	150, 000, 000	15, 000, 000	20, 600	1, 435, 300	1 to 69
1681 to 1690	10 do	28, 000, 000	122, 000, 000	150, 000, 000				
*c*1691 to 1700	10 do	75, 000, 000	115, 000, 000	190, 000, 000				
1701 to 1710	10 do	120, 000, 000	100, 000, 000	220, 000, 000				
1711 to 1720	10 do	120, 000, 000	110, 000, 000	230, 000, 000	22, 000, 000	80, 000	1, 308, 800	1 to 16
1721 to 1730	10 do	120, 000, 000	120, 000, 000	240, 000, 000				
1731 to 1740	10 do	120, 000, 000	130, 000, 000	250, 000, 000				
1741 to 1750	10 do	120, 000, 000	160, 000, 000	280, 000, 000				
*d*1751 to 1760	10 do	110, 000, 000	190, 000, 000	300, 000, 000	28, 000, 000	82, 700	1, 970, 600	1 to 24
1761 to 1770	10 do	100, 000, 000	190, 000, 000	290, 000, 000				
*e*1771 to 1780	10 do	100, 000, 000	250, 000, 000	350, 000, 000				
1781 to 1790	10 do	100, 000, 000	280, 000, 000	380, 000, 000	39, 500, 000	73, 500	3, 470, 600	1 to 47
1791 to 1800	10 do	100, 000, 000	320, 000, 000	420, 000, 000				
1801 to 1810	10 do	100, 000, 000	330, 000, 000	430, 000, 000				
1811 to 1825	15 do	115, 000, 000	255, 000, 000	370, 000, 000	24, 700, 000	56, 400	2, 000, 000	1 to 35
	333 years	1, 890, 000, 000	4, 310, 000, 000	6, 200, 000, 000				

Authorities.—Count Humboldt, Abbé Raynal, Mr. Ward, Bullion Report.

a Discovery of the mine at Potosi. *b* Amalgamation adopted in Peru. *c* Brazil mines were worked. *d* Discovery of Biscaina and Sombrerete, Mexico. *e* Exploration of the mine of Valenciana, Mexico.

Value of Gold to Silver, as stated by Lord Liverpool in his letter to the King of England.

	Gold to Silver.
In Persia, according to Herodotus	1 to 11⅓
In Greece, at same period	1 to 13
In Greece, in the time of Plato	1 to 12
In Greece, it is stated by Xenophon at	1 to 10
After the plunder of gold from the temple of Apollo, according to Menander, it was	1 to 10
In the reign of Alexander the Great, it was	1 to 10
In Rome, according to Pliny the elder	1 to 14½⅔
In Rome, after the tribute from the Etolians	1 to 10
The plunder of gold from the Gauls by Julius Cæsar reduced the proportion to	1 to 7½
In the reign of Claudius, Tacitus states it at	1 to 12½
Until the reign of Alexander Severus it continued	1 to 12½
In the reign of Constantine the Great	1 to 10½
The disorders in the Roman Empire under Arcadius and Honorius raised it to	1 to 14⅔
From which it appears that gold, unless when depressed by sudden and unusual occurrences, or enhanced by a dread of public insecurity, may be stated to have been for upwards of nine hundred years in the proportion of	1 to 10 or 12
In England, in the reign of Henry III. 1216 to 1272	1 to 9⅛
Do. do. Edward III. 1330 to 1377	1 to 12½
Do. do. Henry IV. 1400 to 1412	1 to 10⅛
Do. do. Edward IV. 1461 to 1477	1 to 11⅛
Do. do. Henry VIII. 1510 to 1547	1 to 11 1/10
Do. do. Queen Elizabeth 1560	1 to 11
Do. do. King James I. 1604	1 to 12⅛
Do. do. do. 1611	1 to 13⅛
Do. do. Charles II. 1665	1 to 14⅛
Do. do. George I. 1717	1 to 15⅛
Relative proportions in China, according to Humboldt	1 to 12½
Do. Japan, do.	1 to 8½
Do. Bengal, according to bullion report	1 to 14 86/100
Do. Madras, do.	1 to 13⅞
Do. Bombay, do.	1 to 15
In the China Diaries, it is stated at sixteen tales of silver for one tale of gold of 100 touch or pure gold. If it is meant to be pure silver also, the proportion would be 1 to 16; but it is believed to be the average fineness of silver in dollars, which would be	1 to 14 295/1000

BALTIMORE, *February* 15, 1830.

SIR: Your letter of the 3d instant contains the following inquiry: "Suppose that ten silver dollars will buy one gold eagle in the United States, when exchange is twenty* per cent. how much more debt will the eagle pay in France or England, than the ten silver dollars?"

The expense of transportation being nearly the same in each case, and the rate of exchange here having no effect upon the relative result, when

* The object of this query was to ascertain the relative value of a payment made in England and France in gold or silver, obtained in the United States, at 1.15. The answer refers to the mint value of the metals, instead of that in the market. The annexed table contains the data for the answer sought.—*Secretary of the Treasury.*

the estimates are founded on a *fixed basis*, (such as the mint valuation) the amount of payment effected in France, (if no adverse exchange there should influence the value of gold or silver, and provided also, that the French mint buys bullion at prices relatively similar to the legal rates,) will be in the proportion of $55\frac{1}{5}$ francs, if in gold, to $53\frac{2}{5}$ francs in silver; equivalent to the difference in the value established by that nation, to those metals respectively, viz: $3\frac{1}{3}$ per cent. in favor of a shipment of gold, or in the ratio of 15 to 1 to $15\frac{1}{2}$ to 1. The relative advantage in England cannot be stated with precision, because a tender of silver to the amount of ten dollars is not legal. According to the average price of American dollars, in 1827 and 1828, of 4*s*. $9\frac{5}{8}$*d*. per ounce, and of gold eagles, at £3 17*s*. 6*d*. making the relative proportions in fine metal, of $15\frac{7}{10}$ to 1; or, at the latest prices, of 4*s*. 9*d*. and £3 17*s*. 9*d*. per ounce, equivalent to $15\frac{15}{16}$ to 1, the profit upon shipping gold, would have been, at the former period, $4\frac{2}{3}$ per cent. or, in December last, $6\frac{1}{4}$ per cent. In order, however, to furnish a more full and satisfactory reply, I have annexed a table, which exhibits, in a condensed form, the intrinsic value of our coins, and of those of the most extensive of the European commercial nations, and also the real par and the computed exchange prevailing with each of them, in reference to England and the United States. This statement is conceived to be deserving of inspection and consideration, in two aspects: First, as to the present influence of exchange operations (which is always in action) in producing an approximation to equality in the relative value of these metals, notwithstanding the arbitrary regulations of particular States; and secondly, as a reference to the estimates which have prevailed for a series of years amongst nations extensively commercial, appears to be the most satisfactory and instructive guide to an accurate knowledge of the value of gold and silver.

The unrestrained operations of commerce in tranquil times, while effecting a just distribution of the quantity of the precious metals existing in currency, would, doubtless, render evident the exact proportion which each metal bore to the other; but mistaken ideas of policy having interposed various restraints, and despotism or anarchy in other States, by engendering distrust, having attached a local and disproportionable value to gold, on account of the comparative facility with which it can be concealed or transported, we are compelled, if advantage is to result from our inquiries as to the prevailing estimates, to confine them to a survey of the regulations of the least restricted, most prosperous, and influential of the trading nations.

In England, (admitted to be the first in commercial importance) the legal value of gold to silver has been, since 1717, 1 to $15\frac{1}{5}$; but in practice, that regulation has been nominal and inoperative: for although, during the greater part of that period, silver in coin (and coinage was without charge) was a lawful tender at 5*s*. 2*d*. sterling per ounce, *if of full standard weight*, yet the Asiatic demand, antecedent to 1797,

having kept the market price above that of the mint; and an order of council subsequently having forbidden the coinage of silver for individuals, the practical effect heretofore has been similar to the regulation now prevailing, which constitutes gold, (for amounts exceeding 25*s.*) the only legal tender in payments. Bank notes circulate freely and most advantageously, under the favor of public confidence, but their issue under £5 sterling being restrained, it is estimated that one-half of the entire currency of that nation is now metallic.

In Hamburg, a city of extensive commerce, and the medium for exchange operations between England, Prussia, and the more Northern nations of Europe, silver has been the money of exchange and of circulation, and the legal measure of value since 1688. Gold is viewed as a commodity, yet it is nevertheless coined in ducats, which bear the nominal value of 96 groots banco each, being equivalent to the relative proportions of 1 to $14\frac{7}{8}$ of silver.

Holland, essentially commercial, and holding for a long period the rank now awarded to England, has maintained, since 1609, until very recently, a system similar to that of Hamburg, attaching nominally to gold, rather a lower valuation, say 1 to $14\frac{7}{10}$. Within a few years, the Government of the Netherlands has adopted the French regulations, as to the composition and the legality of payment of both metals, and has raised the value of gold, in reference to silver, to 1 for $15\frac{7}{8}$. The Bank of Amsterdam having at the same time been discontinued as the great national repository for keeping and assimilating into a money of exchange, silver bullion, and every description of silver coin, it may be justly questioned, whether the old system, under which they had attained precedence in wealth and commerce, was supplanted by the new one, from a deliberate conviction of its superiority abstractedly; but may it not rather have proceeded from the expediency of causing a more general distribution of the national stock of coin and bullion, in consideration of their heavy pecuniary sufferings during the hostility of recent times, and their liability to invasion in most of the European wars?

Previous to the revolution in France, the regulations of coinage established the relative value between gold and silver of 1 to 15, with rather an unusual allowance of remedy. In 1795, the present system was adopted, which continued both metals a legal tender, but it lowered the value of silver to $15\frac{1}{2}$ for one of gold. Although the law has decreed this relative difference, and that both metals are extensively coined, silver is nevertheless (according to my own personal observation and subsequent inquiry) the chief and almost exclusive medium by which exchanges of every description are effected. Gold bears usually a premium of one-fourth of one per cent. and this trivial profit has the effect of withdrawing it from circulation. Travellers like myself, or other individuals, for private convenience, purchase and distribute it, but it disappears as speedily as it is disbursed; exemplifying the nature and

effect of mercantile acuteness, and confirming practically, that gold and silver, any more than coin and notes, will never circulate generally and freely in any country, unless legally restricted to the payment of distinct classes of debts. Since the establishment of the Bank of France in 1801, notes have been issued of the amount of 500 francs and upwards, but it is understood that their circulation is confined to the large banking and mercantile transactions of Paris.

Our own system differs from every other: Congress fixed the relative value of gold at 1 for 15 of silver; and under the natural presumption that gold and silver coin would compose a portion of the general circulation, it has also been enacted, that a tender of either of these metals should be the only legal mode of discharging obligations. In practice, however, and in fact, our currency consists altogether of paper. In this State, and in Pennsylvania, Virginia, and perhaps some others, the fractional parts of a dollar circulate in sufficient quantity to purchase with coin, marketing, or other low priced necessaries; but, in the Carolinas, Georgia, and all that great district Eastward of Pennsylvania, comprising the States most distinguished for commerce and manufactures, and for wealth, there is no transfer of the value of the established unit, that is not effected by paper. This Bank paper is sustained by public confidence, on a specie basis, considered sufficient to liquidate balances accruing amongst the several States, and to supply the demands of foreign commerce. Thus circumstanced, and the course of trade latterly having occasioned the drain of that portion of our specie fund that was gold, instead of silver, which was on all former occasions the denomination required, a considerable sensation has been excited, and various measures have been suggested, as a remedy for this alleged evil.

Upon a deliberate review of the regulations which have been adopted in modern times, with regard to gold and silver, by nations long distinguished for commercial enterprise, sagacity, and success, it appears, that the first in public estimation, is satisfied, after 113 years of experience, that gold alone is the most suitable metal to be used, as an instrument of commerce, and measure of value. Two others of the most eminent in trade have for nearly 200 years given the preference exclusively to silver; while the great rival of the former nation perseveres in placing both metals on a legal equality, although its transfers are almost entirely effected in silver.

If these important commercial nations, whose currency (with the exception of England) is altogether metallic, have experienced, in a long series of years, no material inconvenience or disadvantage, (as we must presume from their adherence to their various systems) in confining practically the standard of value to one metal, is it to be credited or apprehended, that the United States, whose circulation is paper, and whose specie does not exceed the amount adequate to the performance of the limited duties described, can have been injured or inconvenienced, by the exportation of their gold? Is it to be believed, and I submit the

query with due deference to the opinion of others, that the denomination of our specie fund, under our present system, is of material or essential importance? Formerly the demand for silver occasioned it to be current, at from 1 to 3 per cent premium. For nine years past, the extraordinary and unprecedented extent of the British demand for gold has increased (at least temporarily) its value in reference to silver, to an average premium of about 5 per cent.

Our gold has been exported, but an equal amount of silver unquestionably remains.

If a different valuation of these metals had prevailed, and no less than 16 for 1 would have been effectual, a proportion, or perhaps the whole of the gold coin, which we held in 1819, would have remained, but we should most assuredly, in that event, have found an equivalent reduction in the quantity of the silver now possessed. If any evil or real inconvenience has been experienced, I must confess my inability to perceive it.

The Banks which furnished the circulating medium, find their interest, as they conceive, in sustaining the necessary issues, by the smallest amount of metallic coin, consistent with their ideas of efficiency and safety, but its denomination must be unimportant. If, therefore, the public do not use the precious metals for domestic objects, but as change; if the drain of gold has not in fact lessened the totality of the specie fund; and if the denomination of the coin held by the Banks is to them immaterial, the only matter then deserving of consideration, appears to resolve itself into the simple calculation, whether or not we have sustained pecuniary loss by the conversion of the gold portion of our specie into silver coin, at the rate of 5 per cent. premium, which was obtained, and which is in the proportion of 1 of gold to $15\frac{3}{4}$ of silver; or if we estimated the Spanish American dollars at their intrinsic weight of 373 grains, the change has been effected at the rate of 1 for $15\frac{8}{9}$, at which price it will scarcely be contended that any loss whatever has been incurred or suffered.

Besides, it is worthy of the deliberate consideration of legislators, whether it is consistent with sound maxims of policy to interfere with the established measure of value, unless the grievance is obvious and oppressive, and the producing cause likely to operate onerously and durably. The magnitude of the British demand for gold has been the principal cause of the deprivation complained of, and its effects have been more sensibly experienced, in consequence of an increased consumption of European manufactures in India and China, having materially diminished the English demand for silver for that trade. On the other hand it may be alleged, that, although the aggregate produce of the American mines, for 20 years past, has decreased from one-third to one-half, compared with the product of preceding years; yet, inasmuch as Brazil has been comparatively exempt from commotion, and that gold being found in alluvial soils, at a trifling depth, facilitates the return to mining operations, there can be no hesitation whatever (even in absence

of authentic records from the mints) in concluding, that there must have been a material increase in the relative amount of gold produced since 1810. Present prices doubtless indicate an unusual scarcity of that metal; but it is not perceived, in the general aspect of the trading world, that there are evidences of changes sufficiently distinct and important in their character to authorize the conclusion that the recent considerable rise in the relative value of gold will be unchangeable and permanent.

For nearly one hundred years antecedent to 1808, gold, in the great regulating market of England, was on an average of less value than our present standard of 1 to 15. For nine years past, it has however been current at from 1 to 15½, to 1 to 16 of silver, but that period in the history of commerce, (which is in my opinion an accurate regulator) is certainly too short to invite or authorize legislative interference, with the view of effecting an alteration in the established measure of value.

Gold and silver, according to the definition of celebrated writers, are commodities, called by way of eminence money, and are the peculiar merchandise, for which every other description of merchandise is readily exchanged—the great instrument of commerce, and a powerful labor saving machine, which has supplanted the tedious and expensive operation of barter. They are, also, the universal measure of value; but whatever performs a duty so important in its extent and consequences, ought to be *as invariable as possible.* Any given quantity of gold, or of silver, will, in all nations, and at all times, be equal to the *like* quantity of the same metal, but the history of commerce establishes the fact, that they are constantly fluctuating in reference to each other, and have actually varied to the great extent of from 7½ for 1, to 17 for 1.

It is therefore obvious, that, in adopting both metals as a standard, we have not chosen the *least* variable measure. Either gold or silver must, in the nature of things, be *less mutable* than both, and independent of the decided superiority of either as a uniform measure. The suggestion of such an alteration in the standard of value, is deserving of the deliberate consideration of Government, from the fact, that, in the event of *one metal* being selected, and regulated as a legal tender, the intervention of the Legislature can never afterwards be required, if the weight and purity of the coin be preserved.

It secures to the community the uninterrupted use of that description of coin to which custom attaches every nation; while it does not exclude the other metal from use in all foreign transactions, or from being as effective as an undoubted bill of exchange, or bank note, in making large payments. The British system, which gives the preference to gold, does not deprive its traders of every necessary supply of silver, as is evinced by the low market price of that article, (dollars being 4*s.* 8⅞*d.* per ounce.) And it is believed that Holland, during her old system of preferring silver, coined more gold ducats than any of the commercial States.

Gold and silver, like all other commodities, will find the way to the best market, and the ability of nations to undertake the most extensive operations in domestic industry, or in foreign commerce, is not in any

degree limited by their regulations in regard to coins, but by the aggregate quantity and value of their surplus products.

I have not mentioned silver as the most suitable metal to select for our standard, in consequence of distinguished economists alleging it to be "the fittest of all metals to be this measure of value," because I admit, that speculative views, however plausible and incontrovertible, must accommodate themselves to existing practice, and to peculiarity of circumstances and position.

Our gold has disappeared, and possessing silver only, its selection is recommended by the powerful motive of public convenience; besides, generally speaking, dollars are our money of account and of contract. Silver is the metallic medium to which we have been accustomed, for it was only when dollars were at a premium, that the Banks, from necessity, or choice, occasionally passed a small supply of gold into circulation. And Bank notes, which may be called emphatically our currency, circulate on the confiding faith of the public, that the issuers can and will redeem them, when demanded, with dollars.

Thus, present convenience and previous habit unite in giving the preference to silver, and the choice of that metal is still farther recommended by our geographical position. We carry on an extensive trade with Mexico, whose mines, not long since, furnished nearly two-thirds of the entire produce of silver. We are already partially engaged in distributing to the commercial world her annual surplus of that valuable commodity; and our vicinity and enterprise authorize a reasonable expectation, that we shall finally exercise such an extensive agency in that business, as will render it an object of interest, as well as convenience, to use silver exclusively as our standard of value.

Notwithstanding my sincere conviction, that I have great occasion to apologise to you for trespasing on your time with such a voluminous detail, when your request, very possibly, did not contemplate more than a distinct reply to your specific query, I shall nevertheless trust to your kind indulgence, that the importance of the subject, (however inadequately surveyed) will likewise serve as an acceptable excuse for one or two additional remarks. When I suggested, in my former letter, that gold, being so portable, in comparison with silver, strongly recommended its use as a subsidiary currency, and that, when confined within prescribed limits, it was susceptible of such an increase in value as would secure its permanent possession, without influencing prices unfavorably, I ought to have added, that its coinage, and its issue, at any valuation, would not, in the present state of our currency, maintain it in circulation. It is a practical truth, uniformly realized, that paper and coin, *of the same denomination*, will not circulate *together*, and my assent to the correctness of that principle convinces me, that the laudable intention of the committee of the Senate, in recommending the coinage of dollars, with the view of improving the currency, by placing and maintaining them in general circulation, will, without doubt, be entirely frustrated in all those States where notes of *one dollar are issued*. Enter-

taining the opinion, that the banking system, judiciously administered, confers many and important advantages upon commercial and manufacturing communities, and conceiving also, that the progress in prosperity of every nation, is intimately interwoven with a wise regulation of pecuniary concerns, I have been accustomed to advert with interest to all important vicissitudes.

Looking back to the peace, a short period, fresh in the memory of every man, the wretched state of our currency for the two succeeding years cannot be overlooked; the disasters of 1819, which seriously affected the circumstances, property, and industry of every district of the United States, will be long recollected. A sudden and pressing scarcity of money prevailed in the Spring of 1822; numerous and very extensive failures took place at New York, Savannah, Charleston, and New Orleans in 1825; there was a great convulsion amongst banks, and other moneyed institutions, in the State of New York, in 1826; the scarcity of money amongst the traders in that State, and Eastward, in the Winter of 1827 and 1828, was distressing and alarming; failures of banks in Rhode Island and North Carolina, and amongst the manufacturers of New England, and of this State, characterize the last year; and intelligence is just received of the refusal of some of the principal banks in Georgia to redeem their notes with specie;—a lamentable and rapid succession of evil and untoward events, prejudicial to the progress of productive industry, and causing a baneful extension of embarrassment, insolvency, litigation, and dishonesty, alike subversive of social happiness and morals. Every intelligent mind must express regret and astonishment at the occurrence of these disasters in tranquil times, and bountiful seasons, amongst an enlightened, enterprising, and industrious people; comparatively free from taxation; unrestrained in our pursuits; possessing abundance of fertile lands, and valuable minerals, with capital and capacity to improve, and an ardent disposition to avail ourselves of the advantages of these great bounties.

Calamities of an injurious and demoralizing nature, occurring with singular frequency, amidst a profusion of all the elements of wealth, are well calculated to inspire and enforce the conviction, that there is something materially and radically erroneous in our monetary system, were it not, that the judgment hesitates to yield assent, when grave, enlightened, and patriotic Senators have deliberately announced to the public, in a recent report, that "our system of money is in the main excellent, and in most of its great principles, no innovation can be made with advantage."

Reiterating the expression of my apology for the tediousness of these details,

I have the honor to remain,
With great respect, Sir,
Your very obedient ser'nt,

JOHN WHITE

S. D. INGHAM, Esq., *Washington.*

COMPARATIVE VIEW of the quantity of fine metal, in equal amounts of currency, of the coins of the United States, according to the Mint regulation; and also of those of England, France, Holland, and Hamburgh, as stated by Mr. Tate, in his return of assays; likewise, the real par of exchange between each of those countries, and late quotations of the computed exchange.

Coins and Currency.	Fine metal in equal amounts of the same currency.	Gold to silver.	United States.				England.			
			Equivalent sum in dollars & cents.		Profit.		Equivalent sum in pounds, shillings, and pence.		Profit.	
			If in gold.	If in silver.	If in gold.	If in silver.	If in gold.	If in silver.	If in gold.	If in silver.
United States.										
Gold eagle of 10 dollars	247½ grs.	1 to 15	10 00				£2 3 9⅜		1⅛	pr. ct.
10 silver dollars	3712½ do			10 00				£2 3 2⅜		
England.										
Gold sovereign of 20 shillings	113 do	1 to 15⅛	4 56½		pr. ct.	1⅛	1 0 0			
4 silver crowns, 20 do	1718⅞ do			4 63				1 0 0		
France.										
Gold Louis, 20 francs	89⅝ do	1 to 15½	3 62⅜		pr. ct.	3⅛	15 10⅜		pr. ct.	2
4 silver 5 franc pieces	1390 do			3 74⅘				16 2⅕		
Holland.										
Gold William, 10 guilders	93⅛ do	1 to 15⅞	3 77⅞		pr. ct.	5⅝	16 6½		pr. ct.	4½
10 silver guilders	1485 do			4 00				17 3⅜		
Hamburgh.										
Gold ducat, 6 marks, Banco	52⅞ do	1 to 14⅞	2 12⅜		⅝	pr. ct.	9 3⅜		2⅛	pr. ct.
6 silver do	783⅜ do			2 11½				9 1⅝		

COMPARATIVE VIEW—Continued.

Coins and Currency.	France.				Holland.			Hamburgh.		
	Equivalent sum in francs and centimes.		Profit.		Equivalent sum in guilders and centimes.		Profit, in gold.	Equivalent sum in marks and shillings, Banco.		Profit, in silver.
	If in gold.	If in silver.	If in gold.	If in silver.	If in gold.	If in silver.		If in gold.	If in silver.	
United States.										
Gold eagle of 10 dollars	fc. 55 20				g. 26 47			M. 28 2⅜		
10 silver dollars		fc. 53 40	3⅓	pr. ct.		g. 25 00	5⅝ per ct.		M. 28 6⅜	pr. ct. ⅜
England.										
Gold sovereign of 20 shillings	25 20⅓				12 09			12 13⅜		
4 silver crowns, 20 do		24 73	2	pr. ct.		11 57	4½ per ct.		13 2⅜	pr. ct. 2⅛
France.										
Gold Louis, 20 francs	20 00				9 59			10 3⅓		
4 silver 5 francs pieces		20 00				9 36	2⅔ per ct.		10 10½	pr. ct. 4⅛
Holland.										
Gold William, 10 guilders	20 85				10 00			10 10½		
10 silver guilders		21 37	pr. ct.	2⅝		10 00			11 06	pr. ct. 6 7/16
Hamburgh.										
Gold ducat, 6 marks, Banco	11 75				5 64			6 00		
6 silver do		11 27½	4⅛	pr. ct.		5 28	6 7/16 pr. ct.		6 00	

		Equivalent to dollars and cents, per pound sterling.
Rates of Exchange at London, December 22d, 1829, for bills at short sight.		
Upon Amsterdam, $12\frac{40}{100}$ guilders per pound sterling; real par, 12.09 guilders, difference $\frac{31}{100}$, equal to $\frac{1}{4}$ per cent. premium	= $12\frac{40}{100}$ guilders, at the real par in silver, at 40 cents each	= 4. 88
On Paris, $25\frac{75}{100}$ francs per pound sterling; real par, 25.20 francs, difference $\frac{55}{100}$, equal to $2\frac{1}{8}$ per cent. premium	= $25\frac{75}{100}$ francs, at the real par, $5\frac{34}{100}$ francs per dollar	= 4. 82
On Hamburgh, $13\frac{1}{16}$ marks banco, per pound sterling; nominal par, 13.3 marks banco, difference $\frac{1}{16}$, equal to $5\frac{3}{4}$ per cent. premium	= $13\frac{1}{16}$ marks banco, at the real par, $35\frac{1}{2}$ cents per mark	= 4. 80¾
Gold having been quoted at Hamburgh at $101\frac{3}{4}$ shillings banco, per ducat, when exchange was quoted at $13\frac{1}{16}$ marks—at the rate of $\frac{1}{16}$ marks, the ducat must have been worth $1\frac{3}{4}$ per cent. more, or 103 shillings, which is an advance of $7\frac{1}{2}$ per cent. upon 96 shillings, the nominal value of the gold ducat; consequently, the real par in gold, in December last, was 13.13½, marks banco difference $\frac{3}{32}$, equal to $\frac{7}{10}$ per cent. premium	Bills on London in the United States, in December, at 60 days, were 9 per cent. premium in the nominal par... = 4. 84½ A bill at short sight, ¾ per cent. additional 4	
	For a bill at sight	= 4, 88¾
Prices of Bullion at Havre, November 30, 1829.		
Standard gold, £3 17*s.* 9*d.* per ounce, including all charges, (*except premium here*) equal to a bill at sight, at		= 4. 65
Bills on London, 1 mo. 25.70 to 25.75 per pound sterling; standard silver, 4*s.* 11½*d.* per ounce		
Spanish dollars, 5.28½ to 5.30 each; average price of dollars, 4*s.* 9*d.* including all charges, &c. do		= 4. 92½
American half dollars, 5.20 to 5.25		

The following paper from the London Times of the 25th February, 1830, was received after the report was prepared; as it contains the views of a highly intelligent person, whose pursuits have led him to practical acquaintance with the monetary system of Great Britain, it is deemed worthy of appending; its chief importance in the present inquiry, is in the declaration that a silver currency may be maintained in England, and made a tender for all payments with gold, at the ratio of gold to silver at the French mint, 1 to 15.5. Mr. Baring was, however, well aware that gold commanded a premium in France, and did not circulate equally with silver, but he probably took into consideration, that making silver a general tender for payments in England, at the ratio proposed, would create a new demand for it, and, consequently, raise the price and bring it in the market into more near conformity with the mint ratio; hence he did not consider it necessary to fix the mint ratio according to the existing market prices. The idea of a silver coinage for payments generally, and another at a higher ratio for small payments, seems to be new, but the retaining the token coinage must have been suggested rather with a view to compromise with the pride and prejudice which support the existing system of silver tokens, than to affect any visible public good. Mr. Baring maintains the doctrine, that silver is the most fit metal for a standard measure of property, both as respects the safety of banks and the public convenience. But the answers of Mr. Baring are also important in showing that the establishment of gold as the exclusive measure of property in England, is not satisfactory, and although there is little probability of a change of the plan while its authors are in power, unless some convulsive panic shall derange their monetary system; yet that other counsels may prevail, and produce a change which might disappoint all the expectations now entertained from alteration in the mint ratio of the United States should the plan suggested by Mr. Baring be adopted, and the ratio fixed at 1: 15.5 in England. That proposed in the foregoing report for the United States of 1: 15.625, estimates silver still so much above its market value that there will probably be ample room for the rise of prices which the proposed change in England would produce without endangering the silver currency.

PARLIAMENTARY PAPER.—COIN.

(*Extract from Minutes of Evidence taken before the Committee for Coin, at the Board of Trade, April* 26, 1828.)

ALEXANDER BARING, ESQ., M. P.—Examined.

Q. Is it your impression that it is possible and desirable to maintain in this country a silver currency as a legal tender, founded on the proportion of silver to gold established in the currency of France, or something very near it; at the same time that we maintain our present silver currency, which is obviously not in that proportion, and that there would be an advantage in that system?

A. I have always thought so, and certainly think so still. I have no doubt about it.

Q. Would you execute that by issuing silver coin of the same denominations as the present silver coin, but of a different standard, or by confining it to a silver coin of a new denomination?

A. It is quite clear that, if it were desired to have a silver coinage, all of the same weight and quality, the present silver coinage must be called in entirely; but I can see no difficulty whatever in the co-existence of a silver coinage as a legal tender, in the proportion, or nearly the proportion, now existing in France, with the present silver coinage remaining as a token, and provided the limitation continues as to the amount: with this precaution, I feel quite confident there can be nothing to prevent those two silver coinages existing together.

Q. Would you put them under the same denomination?

A. No, I think I would not. You might take one of two plans; you might either call in the present silver currency, and put the whole on the same footing, which would be a considerable expense, and I think an unnecessary one, or you might continue the silver now out, which now exists as a token silver coinage. There would be then the present gold coin and the new silver coin as legal tenders, and as they would not be interfered with by the token coinage, and as there is a considerable profit on the coining the latter, it might be continued as a measure of economy, and as a means, in some degree, of defraying the expenses of the Mint. When any additional token coinage should be wanted, I do not see any objection to keeping the shillings and sixpences and half-crowns as at present. In that case, I should propose that the 5*s.* pieces should be called in, and that the silver coin for legal tender should be confined to crown pieces; or, if it should be preferred, for the purpose of making a decimal division of the pounds, 2*s.* pieces might be substituted. In that case you might leave the few 5*s.* or 2*s.* pieces is not material, only, that if you make them 5*s.* pieces, then you would have to call in the 5*s.* token pieces which are at present out.

Q. The circulation of the country would consist of a silver coinage of tokens, being of a legal tender only to a limited amount; and a silver coinage being a legal tender to an unlimited amount; and a gold coinage.

A. Exactly so.

Q. What are the advantages which you contemplate from the additions to our present currency, of a silver coinage co-existent with the token silver issued in the manner you have described?

A. In speaking of the advantages, I of course set aside entirely any question of altering the intrinsic value of the standard, because, even supposing that any advantage would result from that to the country, as it would be in itself an act of dishonesty to do so, I set aside that part of the question, as presuming it not to be in the contemplation of Government. It is undoubtedly true, that, looking at the old law of this country, since the time of King William, when, in given proportions,

both gold and silver might have been taken to the Mint, and at the present price of silver, the existing standard is raised, I should say, nearly 4 per cent. by the omission of silver upon the settlement of our standard as it now exists. If gold and silver were concurrent legal tenders of the old Mint regulations, silver would at present be the practical standard of the country, as the debtor always acquits himself in the cheapest metal he is enabled to do so by law.

Gold was his cheapest payment, and therefore the practical standard of the country at that time; in consequence of subsequent variations in the price between gold and silver, silver would be so now. Comparing, therefore, the intrinsic value of our double standard as it existed from the period of the act of King William, down to (I believe) 1778, when silver was prevented from being sent to the Mint, with what it now would be if the same system had been suffered to continue, I say that an alteration has been made in favor of the creditor and against the debtor, in the proportion of about 60 to 62. The calculation is simple and undeniable. Previously to the law of 1778, any person might send a pound weight of silver to the Mint, and claim, in return, 62*s*., which were then (being of full weight) a legal tender to any amount. This pound weight, or, in other words, the 62*s*. he might now purchase for 60*s*. of our present money, and I believe even a fraction lower. If, therefore, our old law had continued, silver would now be our practical standard; and the charge of all debt, whether public or individual, would be lighter by 3¾ per cent.; exclusive of that, farther relief to the debtor which arises from the greater cheapness of money, resulting, in my opinion, from the facilities afforded to all operations of credit by the double standard. This part of the subject is not, like the other, susceptible of any precise estimate; but my own opinion is, that the two considerations taken together, make a difference, little if any thing, short of 5 per cent. It may be proper here to add, that, at the present price of silver, what I call the token silver coin, is coined at a profit of full 10 per cent. the pound of silver, costing 60*s*., being coined into 66 token shillings; and experience has shown that money for small change, limited in amount, and in the amount for which it is a legal tender, may exist most usefully, and without affecting the value of the standard of the country.

Although I have taken the liberty of stating my view of this so much contested subject, I presume your Lordship's question to apply to my opinion of the advantages of a double standard, regulated according to the present intrinsic value of the gold coin; for although injustice may have, and in my opinion has, been done to the debtor by the exclusion of silver, and although that injustice, being more than compensated by the depreciation of paper for so many years, only came fairly in play from the period of Mr. Peel's bill; yet, a sufficient time has elapsed to make it both inexpedient and unjust to return to any adjustment of an error so long gone by.

I proceed, therefore, on the presumption that there is no intention to

alter the present standard of value, and confine myself simply to the question of the facility and advantage which would result from having a standard of two metals, as we had before 1778, and as every other country of the world besides ourselves now have.

At present, speaking of a state of peace and quiet, I do not see that there is much fault to find with our present circulation; but the value of a medium of circulation, in a country where it is necessarily combined with much paper, and especially where the paper forms the larger portion, depends on its flexibility, on its power of contraction and expansion to meet the varying circumstances of the times, the desideratum in this country, where neither justice nor policy permit increasing the value of money, is to keep out as much paper as can be safely kept out. A sudden change from peace to war, a bad harvest, or a panic year arising from over-trading and other causes, immediately impose upon the Bank of England, which is the heart of all our circulation, for the purpose of protecting itself, to stop the egress of specie, sometimes even to bring in large quantities into the country. These indispensable remedies are always applied with more or less restriction of the circulation, and consequent distress to those who have been for some time trading under expectations of the ordinary facilities of circulation and banking. No care or prudence can enable the great Bank, on which all smaller ones rest in the day of trial, to avoid occasional resort to those measures of self-defence: and that system of currency is the best, which admits of their being made the least frequently, and with the least possible effort and derangement. Now it is evident that the Bank, wishing to reinforce its supply of specie, can do so with infinitely increased facility, with the power of either drawing in gold or silver, than if it were confined to only one of the metals. The choice is already much, but the circumstance that silver is the practical standard of Europe, more than doubles the certainty and facility of procuring a supply. Bills on Paris, Amsterdam, Hamburgh, &c. once taken, secure silver, in which they must be paid; but if gold alone will answer the purpose of the Bank, gold is a merchandise which you must go into the market and buy. It may be forestalled by others speculating upon the Bank's known necessities, it will always be enhanced in price by them, and the real increased difficulty acting in an increased ratio upon the apprehensions of a body of directors, whose characters are at stake, will lead to extravagant precautions, the tendency of which will always necessarily be to cramp and reduce the circulation, and to increase the existing distress. That medium of legal tender is best which affords the best security against these forced operations. The greater the facility of the Bank to right itself in these constantly recurring ebbs and floods in its specie, the greater will be the facilities given to those who depend upon it, and the less frequent will be those sudden jerks and changes so fatal to credit and to commerce. As I have already said, in quiet, orderly times, our present system works well enough, but these sudden storms arise in

time of peace, as well as of war. The only one which we have seen, since the adoption of our present moneyed system, was in 1825, and, I believe, an investigation into what then took place, will strongly confirm my observations. That the efforts of the Bank for self preservation made great havoc among its dependents through the country is well known; and I believe it is equally so, that, while it was rummaging every corner for gold, which could alone answer its purpose, it was sending large sums of silver from its coffers, which were perfectly useless. The wants of the Bank, when they occur, interest speculators and jobbers of every description, and, independently of operations to derive a profit from the price of the gold wanted, there will be persons interested in thwarting the Bank, and preventing its supply.

Q. Do you conceive it possible that any degree of skill or ingenuity in adjusting the proportions of gold and silver, can be such as to prevent the one or the other from having a preference, and becoming, practically, in the course of a short period of years, the currency of the country, almost to the exclusion of the other, except for purposes of convenience?

A. I think it is not possible. The practical currency may change from one metal to the other in a short space of time. The fact of gold having been the practical tender in this country under the former system, and that silver would now be so if that system continued, is a practical proof of it. It will vary with the variations in the relative value of the metals, however wisely you may adjust the difference; and there is no doubt that the whole inconvenience and difficulty of the case arises from this circumstance. The objections to the two metals is, that they are constantly varying; and it may be doubtful whether the fact of that tendency to vary does not make it more desirable, in the case of a double standard, to take something in the way of seignorage or brassage; in other words, something for the price of manufacture, than you otherwise would, so as to counteract a little the tendency to melt the one or the other down. This allowance would tend, in some degree, to meet an increased expenditure at the Mint: for the consequence of varying proportions between the two metals might increase the charges at the Mint, by the occasional melting of the rejected metal. On the contrary, if you put something of the value of manufacture into the coin, then, even supposing your coin goes abroad by any altered proportion, or any state of exchange, it is an inducement to the persons abroad to keep it in the shape of coin.

Q. Supposing we were to adopt precisely the proportions of the French Mint, would not the result probably be the same as in France, namely, that silver would become the bulk of our metallic currency, and that gold would be in use only for those purposes for which it was more convenient; and that, in consequence, the diffusion of gold, which is now concentrated in this country, would be more equable over the civilized countries of the world?

A. Undoubtedly, if you were to take the same proportions. I do not

see any reason why exactly the same result should not take place, with this single difference, the extent of which I am not able to calculate; that this country partially rejecting gold as its tender, the effect would be to reduce to some extent the value of gold over the rest of the world. There is no doubt that, when this country returned to payments in specie, supposing we wanted from £15,000,000 to £20,000,000 of gold for instance, and that, to that extent there was a demand on the rest of the world for gold, gold got an increased value from that circumstance. If you make silver a large proportion of your currency, and still more if you were to make it the bulk or the whole of your currency, silver would gain something in value over gold. A free concurrent circulation of the two metals in all countries would certainly keep the proportions of each to the other most equable, and have little other ground for fluctuations than such as may arise from the charges of producing them. At present these fluctuations are more affected by changes in the wants of the gold or silver circulating countries than by any other cause.

Q. The result would be that silver would rise in value over the continent, as we claimed a larger proportion?

A. Yes.

Q. Does not the preference given to gold in the French currency arise from silver being over-valued?

A. Undoubtedly.

Q. Supposing both gold and silver coin made legal tenders in this country, and that the proportions rather favored gold as a legal tender, would not the advantage of a double standard, such as it exists in France, be obtained, without our disturbing the existing mode of our currency; that is, with the advantage of retaining gold as the bulk of it, and silver as an aid to it; just as in France, silver is the currency and gold the aid?

A. This might certainly be easily done; by a very slight difference we could make gold the ordinary and habitual currency, and silver the auxiliary, which would come in aid on an emergency; the variation in France is seldom above a tenth per cent.; it sometimes runs up to a quarter per cent. It has been, I am told, something higher on particular occasions; when the Bank of England was running all over the continent for gold, this was the case; I believe, also, at another time for the service of the peninsula; now and then, from casual circumstances, one metal gets preferred. If Russia goes to war in a distant part, she does it always with gold. At the present time, gold has been bought up to a large extent for this purpose, but unless any disturbing causes of this description arise, a very slight difference of one tenth or one fourth per cent. would determine the use of one metal or another.

Q. As they are liable to vary in their relative proportions, would it not be a difficulty attending such a system, that we should have frequently to re-adjust the proportions?

A. In using the two metals, one of two courses must be taken—either

to leave them to chance, and to give to the debtor the advantage of the option, as was the case under the old system, or to fix at once which is to be your standard, and to adjust at given periods your other metal to it. If you want the advantages of the fixity of standard of one metal with the facilities and conveniences of two, you must take this latter course. I gave this opinion when the questions of currency were last before Parliament, and I see no objection to it now. This system of occasional adjustment has been practised in France, and in these matters practical experience is worth all the theories of mere speculation. It is quite clear that, without this occasional adjustment, you may lose the benefit of the double standard, which is only to be preserved by keeping the value of gold and silver coins within a fraction of each other. Nobody can say how their value may vary according to the varying cost of their production, and as it is the duty of the State to see justice done between all debtors and creditors through the kingdom, I should prefer the principle of adjustment to leaving the result of their contracts or engagements to greater hazard.

EXTRACTS FROM THE REPORTS OF MR. C. P. WHITE, FROM THE SELECT COMMITTEES OF THE HOUSE ON COINS, ETC.

[Mr. White was (February 22, 1831) the reporter of a committee to which was referred a resolution of the House of December 23, 1830, to inquire into the expediency of giving the Legal-Tender quality to foreign Coins. (See page 751.)

On March 17, 1832, he made a report for the committee on the state of the Coins, the relative value of Gold and Silver, etc., in which, in addition to other documents, the report of date December 15, 1830, made by Mr. Sanford, of New York, from the Senate Committee on Coins, etc., was carefully digested.

On June 30, 1832, appeared a report from the Select Committee on Coins, whose commission embraced the widest range of questions. In view of the actual novelty of these forgotten facts I transcribe their mandate, which was as follows:

They were

Instructed to inquire into the expediency of authorizing prompt payment in coin for bullion delivered at the Mint requiring a seigniorage not exceeding the expense of coining, making gold a tender in large and silver a legal tender in small payments, or the reverse; and to report whether any and what evils or inconveniences result from the currency of bank notes of small denominations and what are the appropriate remedies: whether it is practicable and expedient to restrain this circulation by providing that bills of such banks as issue them shall not be received in payments to or deposits on account of the United States, or by any other and what means within the legitimate powers of Congress; and what further measures are requisite for the purpose of preserving an adequate supply of gold and silver coins in use, and increasing the specie circulation of the country; and also, to inquire into the expediency of making silver the only legal tender, and of coining and issuing gold coins of a fixed weight and fineness, which shall be received in payment of all debts to the United States at such ratio as may be fixed from time to time, but shall not otherwise be a legal tender; and also to present their views with respect to small coins.

In 1834 (February 19), Mr. White made a final report from the Committee of the House on Coins, in which the entire body of the three reports before mentioned was reprinted in full, the entire document containing 110 pages octavo of closely printed matter. It is from the final report of 1834 that the following citations of the pages is taken].

Extract from the Report of June 30, 1832 (Page 7).

Upon mature deliberation, the committee cannot doubt the correctness of the following general principles in regard to money, corroborated by the history of commercial nations, and recorded in their former report.

1st. "That gold or silver is the only sound, invariable, and perfect currency that human wisdom has yet devised."

2d. "That every nation will possess its equitable and useful portion of the gold and silver used as money, if they do not repulse it from domestic circulation, by substituting a different medium of exchange."

3d. "That *one metal* may be selected with a certain assurance of finding *in the metal chosen* such proportion of the entire amount of the money of commerce, as their exchangeable commodities bear to the total amount of merchandise produced."

4th. "If both metals are preferred, the like relative proportion of the aggregate amount of metallic currency will be possessed, subject to *frequent changes from gold to silver*, and *vice versa*, according to the variations in the relative value of these metals."

The committee think that the *desideratum in the monetary system is the standard of uniform value;* they cannot ascertain that both metals have ever circulated simultaneously, concurrently, and indiscriminately, in any country where there are banks or money dealers; and they entertain the conviction that the nearest approach to an invariable standard is its establishment *in one metal*, which metal shall compose exclusively the currency for large payments.

Impressed with the accuracy and practicability of the principles and views detailed, the committee do not conceive it to be of much importance, abstractedly considered, whether "gold be a tender in large, and silver a legal tender in small payments, or the reverse." The money of England, for large transactions, is gold; that of France is in practice silver; and the prosperity of these nations, under different systems, exemplifies that skill, industry, and capital are the active and efficient causes of producing wealth.

If the currency of the United States is to continue to be composed exclusively of bank notes, the committee would recommend the regulation of gold at such increased value as would convert the specie fund into that metal. Gold being the money of England, where our foreign trade and exchanges chiefly centre, an adverse balance of payments would be more quickly perceived and liquidated, and the currency would maintain greater uniformity of value; a real par of exchange would obtain, the variations from which would promptly indicate the course of trade, and suggest the necessary correction.

The committee cannot perceive that any benefit could arise from "coining and issuing gold coins of a fixed weight and fineness, which shall be received in payment of all debts to the United States at such rates as may be fixed from time to time."

A varying scale of value in coin must have a prejudicial effect on contracts, issuing to the gain of the importing merchant, the owner of gold, or the Treasury, according to the nature of the regulations or of events.

If it be contemplated to coin gold for this object upon Government account, at a high relative rate, the bond payer or debtor for lands will scarcely apply for a medium of payment by the use of which he will be no gainer; if it be coined without charge at an enhanced value, the Treasury will lose whatever the depositor at the mint may gain, as the disbursements of the Government, howsoever received, must be paid, like other debts, according to the established standard.

Import duties form an important and component part of the current value of the great mass of the foreign commodities; this value should be in accordance with the practical currency, and uninfluenced by any uncertain or fluctuating measure; besides, the aggregate amount of the public revenue has heretofore been justly considered as an instrument which might be usefully and effectually exercised for the beneficial object of maintaining uniformity of value in the circulating medium.

Silver is the ancient currency of the United States, the metal in which the money unit is exhibited, the money generally used in foreign commerce, and that description of the precious metals, in the distribution of which we exercise an extensive agency. The committee, upon due consideration of all attendant circumstances, are of opinion that the standard of value ought to be legally and exclusively, as it is practically, regulated in silver.

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From the Report of March 17, 1832 (Page 53).

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It does not appear that there was any export of gold from the United States, of consequence, from 1792 till 1821—a period of such extraordinary commercial vicissitudes, that exchange must have occasionally been unfavorable. The relative legal value during that time was only 15 of silver for 1 of gold: and silver having been frequently at a premium of 1 to 3 per cent., gold could of course have been obtained without difficulty. Such respectable opinions and confirmatory circumstances, connected with the fact that England has long been the great market for gold, seem to authorize the inference that General Hamilton did not undervalue gold in 1792. The coinage of France in 1785–6, having been regulated at 1 of gold for 15½ of silver, exhibits a material difference in the estimate of value in that country. It may, however, be observed, that some period of tranquility, and of public confidence, as well as an adverse balance of payments with other nations, is necessary to test the accuracy of such regulations. Internal dissatisfaction, loss of public credit, revolutionary movements, failure in paper currency, domestic or foreign wars, influence materially the relative value of gold to silver in consideration of the comparative portableness of gold, for concealment, or for facilitating military operations; one or other of these extrinsic causes influenced in some degree the pecuniary regulations of France, from 1785–6 till 1816. The fact that gold in France did not command a premium of more than one-half per cent. "during the four years which immediately followed the resumption of specie payments in England," cannot, it is conceived, be considered "a conclusive proof that it could not at most have enhanced the price of gold more than $\frac{3}{10}$ per cent., since, in that case, the advance would also have taken place in France, whence, in fact, a considerable portion of that demand was supplied." The proof is admitted to be conclusive as to the actual value of gold in

France; but it must be recollected that if the balance of payments between England and France was about equal, and there cannot be much preponderance where the currency is metallic, the charges of transportation must in such case be added, in order to ascertain the English value. Suppose that the proportions in French coin are equal to 1 for 15.7 of silver, if a premium of $\frac{3}{10}$ per cent., probable deficiency in the weight of circulating coin $\frac{1}{2}$ per cent., and insurance, freight, &c., $\frac{1}{2}$ per cent. be added, it would place gold in England at the high relative rate of 1 for 15.9 of silver, equivalent to a premium of six per cent. upon our mint price. That the demand for gold was sensibly experienced in France at that period may be inferred from a statement of the gold coined at the mint of France, according to Mr. Tooke; in 1818 the amount was 126 millions of francs; in 1819, 52 millions; in 1820, 28 millions; and in 1821, when the British demand was active, the coinage of gold in France nearly ceased, being only four hundred thousand francs in that year.

If the statements of the relative amounts of supply of the precious metals are entitled to any confidence, the increase in the production of gold since the commencement of revolutionary movements in Spanish America, in 1810, must have fully compensated the reduction in the demand for silver in Asia.

If the value of gold had risen from an increase of cost at the mines, which it is reasonable to conclude constitutes its real value, that increase of value would doubtless have been distinctly exhibited in England antecedent to 1797, and since, in general commerce, whether England had returned to specie payments or not. There were certainly no indications that gold was rated too low in our standard of 1 to 15 earlier than 1821, when the English demand commenced. The fact of concomitance in events is not relied upon as a proof of effective agency; but a great demand for gold, and an increased relative value for gold, being coeval circumstances, and in accordance with the universally admitted principle, that a new or sudden increase of demand will enhance prices, it appears to be a natural and rational inference, that the British demand for gold was the cause of increasing the value in respect to silver.

Mr. Baring thinks "there is no doubt that when this country (England) returned to payments in specie, supposing we wanted 15 to 20 millions of pounds of gold, for instance, and that to that extent there was a demand on the rest of the world for gold, gold got an increased value from that circumstance."

Mr. Tooke admits that, at first, he coincided in this opinion, but, subsequently, he was inclined to question this "presumption (which, in my opinion, has been much too generally and hastily admitted,") chiefly on the ground that the supply of silver has actually increased—a conclusion, which is not sanctioned by any authentic record within the knowledge of the committee, and at variance with the efforts usually produced by revolutions and sanguinary civil wars, in any country, upon the mount of its staple commodity for exportation.

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[Res. No. 7, 22d cong., 1st session, House of Reps.]

GOLD AND SILVER COINS, &c.

MARCH 26, 1832.—Printed by order of the House of Representatives, with the subjoined estimate.

Mr. WILDE submitted the following Resolution:

Resolved, That the Committee on coins be instructed to inquire into the expediency of authorizing prompt payment to be made in coin for bullion delivered at the mint, requiring a seignorage not exceeding the expense of coining, making gold a legal tender for large, and silver a legal tender for small payments only, imposing a duty on bank bills of low denominations, or a tax upon the banks issuing them, or providing that the bills of such banks shall not be received in payments to, or deposites on account of, the United States; and of adopting any, and what other measures, for the purpose of preserving an adequate supply of gold and silver coins in use, and increasing the specie circulation of the country.

Mr. Wilde's resolution as proposed to be modified when it next comes up:

Resolved, That the Committee on Coins be instructed to inquire into the expediency of authorizing prompt payment in coin for bullion delivered at the mint, requiring a seighorage not exceeding the expense of coining, and making gold a tender in large, and silver a legal tender in small payments only, or the reverse; and that the said committee do further inquire and report whether any and what evils or inconveniences result from the currency of bank notes of small denominations, and what are the appropriate remedies; whether it is practicable and expedient to restrain their circulation, by providing that the bills of such banks as issue them shall not be received in payments to, or deposits on account of, the United States, or by any other, and what means, within the legitimate power of Congress; and generally to inquire, and report what further measures are requisite for the purpose of preserving an adequate supply of gold and silver coins in use, and increasing the specie circulation of the country.

EXTRACT FROM A REPORT OF THE DIRECTOR OF THE MINT, SAMUEL MOORE, TO THE HOUSE OF REPRESENTATIVES OF JANUARY 12, 1833, ON THE RELATIVE VALUE OF GOLD AND SILVER.

[House Rep. 38, 22d Cong. 2d session.]

* * * * * * *

When, at the commencement of the Mint in 1792, the ratio of fine gold to fine silver was established as 15 to 1, it was supposed to be conformable to their relative value in the principal commercial nations of Europe, and it probably was nearly conformable to the mint regulations then prevailing. How far the value of those metals in the foreign market deviated from the Mint proportion during the interval from 1792 to 1821, the means are not possessed to determine. No deficiency, however, in the Mint ratio of gold to silver in the United States became early apparent. Gold and Silver coins remained at par with each other throughout that period. Both were the objects of a premium measured in the actual currency during the suspension of cash payments, but both at the same premium.

The first notice of a premium on gold measured in silver, in the United States, appeared late in 1821. Before the end of that year it had advanced to 5½ per cent. Since that time it has occasionally been as high as 7 per cent. and at intermediate intervals as low as 2 per cent. During the past month it has been from 3½ to 4 per cent.

[The Report gives 15.63 as the average rate in the United States in the preceding ten years.]

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[23d Congress, 1st session, 399.]

MEMORIAL OF SUNDRY BANKS OF NEW YORK,

Praying that certain foreign coins be made a legal tender, that the value of gold coins be regulated, and that the means of coining at the Mint be increased.

MAY 26, 1834.—Referred to the committee on finance and ordered to be printed.

To the honorable the Senate and House of Representatives of the United States:

The memorial of the undersigned, Respectfully represents:

That the dollar of Spain and the gold and silver coins of the United States, constitute, at present, the only legal currency of the country: and that, from the commercial value of the Spanish dollar, and the intrinsic value of the gold coins of the United States, they have become mere articles of merchandise, and are no longer to be considered as forming any portion of the metallic currency.

Thus it appears that the legal currency of the country is practically confined to the silver coins of the United States, of which there is not a sufficient quantity to answer the ordinary purposes of business, much less to meet the extraordinary demands which circumstances occasionally produce. Nor is it practicable to obtain such coins; for recent experience has shown that the powers or operation of the Mint are altogether inadequate, under its present regulations, to furnish the necessary supply, from two to four months being required for the coinage of any considerable amount, and even small sums are not to be obtained without difficulty or delay.

Hence the moneyed institutions of the country, while compelled, by necessity, to adopt the use of foreign coins, are exposed to the evils and

embarrassments arising from the fact that such coins are not recognized by the laws of the land.

Your memorialists, therefore, earnestly, but respectfully, pray, that the dollar of Mexico, Colombia, Chili, and Peru, which are equal in weight and fineness to the Spanish dollar, be likewise made a legal tender, and to pass by tale; and, also, that the five franc pieces of France be adopted at a fixed value, and rendered in like manner a legal coin.

The gold coins of the United States, if rated at their intrinsic value, might be retained in the country, and would consequently become a convenient portion of the metallic currency. And your memorialists respectfully recommend the subject to the attention of Congress.

Your memorialists would also beg leave to suggest the propriety of increasing the powers of adding to the capabilities of the Mint, so as to enable it, on the deposite of bullion, to furnish the coins that may be required, without that injurious uncertainty and delay which are at present experienced, and which so greatly detract from the utility of the establishment.

But in the present state of the metallic currency, your memorialists deem the legalization of the foreign silver coins above mentioned to be of the utmost importance, and they most earnestly request that a law to that effect may be passed without delay.

New York, May 20, 1834.

Signed as follows:

BANK OF NEW YORK, by Cornelius Heyer, *president.*
TRADESMEN'S BANK, by Preserved Fish, *president.*
BANK OF AMERICA, by George Newbold, *president.*
MERCHANTS' BANK, by John J. Palmer, *president.*
MECHANICS' BANK, by John Fleming, *president.*
PHENIX BANK, by J. Delafield, *cashier.*
CITY BANK, by G. A. Worth, *cashier.*
NATIONAL BANK, by Albert Gallatin, *president.*
UNION BANK, by Wm. Howard, *president.*
CHEMICAL BANK, by John Mason, *president.*
FULTON BANK, by John Adams, *president.*
LEATHER MANUFACTURERS' BANK, by F. W. Edmonds, *cashier.*
MERCHANTS' EXCHANGE BANK, by Peter Stagg, *president.*
MECHANICS AND TRADERS' BANK, by Peres Jones, *president.*
BUTCHERS AND DROVERS' BANK, by B. M. Brown, *president.*
NORTH RIVER BANK, by Leonard Kip, *president.*
GREENWICH BANK, by Samuel Whittemore, *president.*
SEVENTH WARD BANK, by Walter Brown, *president.*

NEW YORK, *May* 22, 1834.

GENTLEMEN: We hand you, enclosed, a memorial to Congress from the banks in this city in relation to the metallic currency of the United

States, which memorial we respectfully request you to present to the Senate, and we beg leave earnestly to commend it to your especial care and attention.

Believing that you will fully appreciate the importance of the measures asked for, we shall rely with confidence upon your influence in sustaining them.

Knowing as we do the inconvenience and embarrassments which are occasioned by the present state of the metallic currency, and the inefficiency of the Mint under its present regulations, in furnishing a supply, we feel anxiously, and cannot too strongly represent to you, the importance of the subject, and the necessity for adoption of early and proper measures for relief.

It is in all respects desirable that Congress should, without delay, pass the necessary laws to raise the value of the gold coin of the United States, and to establish certain foreign silver coins as legal currency, but we consider the latter, and a suitable regulation of the Mint, of the highest importance; and, in the present situation of things, as essential to the commercial interests of the country, and absolutely necessary for the convenience and perhaps the safety, of the Banking institutions.

We take the liberty to enclose herein drafts of two bills, one concerning the gold coins of the United States, and the other to make certain foreign silver coins a legal tender. These bills are plain in form, and are confined to the simple objects we all want; and, whatever may be their merits in reference to a perfection of the currency, we believe them to be sound and correct in principle, calculated to avoid objections as to detail, and such as will be likely to obtain a vote of both Houses of Congress in their favor.

We hope, therefore, as the occasion is urgent, and as the bills are limited to a period of only three years, that they may be substituted for those now before Congress, and become laws accordingly; and that, in the intermediate time, such other, and, if you please, more perfect laws may be passed, as the deliberate consideration and wisdom of Congress may prescribe.

Referring you to the remarks which you will find attached to the bills enclosed;

We are, Gentlemen, in behalf of the memorialists,

Very respectfully,

Your obedient servants,

ALBERT GALLATIN.
GEO. NEWBOLD.
JOHN J. PALMER.
G. A. WORTH.

To the honorable SILAS WRIGHT, and N. P. TALLMAGE, *Washington.*

P. S.—The enclosed is a copy of the memorial. The original is sent to the delegation from this city for presentation to the House of Representatives.

A BILL concerning the Gold coins of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, from and after the day of next, the gold coins struck and coined at the Mint of the United States shall be of the following denominations, values, and descriptions, viz.

Eagle.—Each to be of the value of ten dollars current money of the United States, and to contain two hundred and thirty-seven grains and six-tenths of a grain of pure Gold, or two hundred and fifty-nine grains and two tenths of a grain of standard Gold.

Half Eagles.—Each to be of the value of five dollars, and to contain one hundred and eighteen grains and eight-tenths of a grain of pure Gold, or one hundred and twenty-nine grains and six-tenths of a grain of standard Gold.

Quarter Eagles.—Each to be of the value of two dollars and a half, and to contain fifty-nine grains and four-tenths of a grain of pure gold, or sixty four grains and eight-tenths of a grain of standard gold.

SEC. 2.—*And be it further enacted*, That so much of the several acts establishing the Mint, and regulating the coins of the United States, as are inconsistent with the provisions of this act, be, and the same are hereby, repealed.

A BILL regulating the value of certain Foreign Silver Coins within the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act, and for three years thereafter, and no longer, the following silver coins shall pass current as money within the United States, and be a legal tender for the payment of all debts and demands at the rates following, that is to say: the dollars of Mexico, Peru, Chili, Central America, and Brazil, weighing not less than four hundred and fifteen grains each dollar, at one hundred cents each; and the five-franc pieces of France, each weighing not less than three hundred and eighty-six grains, at ninety-three cents and three mills each.

SEC. 2.—*And be it further enacted*, That it shall be the duty of the Secretary of the Treasury to cause assays of the aforesaid silver coins, made current by this act, to be had at the Mint of the United States at least once in every year, and to make report of the result thereof to Congress.

MEMORANDUM.

The importance of the object in view renders it necessary to present each in the most unexceptionable shape, and separated from every other object which might embarrass, and perhaps frustrate the design.

First. Foreign silver coins.

The mode proposed by the enclosed bill is the same which is now in

force with respect to Spanish dollars, and had heretofore been adopted for five-franc pieces.

It was not, and cannot in practice, be attended with the slightest inconvenience.

As to the weight, it is, for the five-franc pieces, the legal weight, and that heretofore adopted for the Mexican and South American dollars, that now required by law for the Spanish. In reality Mexican dollars weighing 414½ grains are, on account of the difference in fineness, equal to value to our dollars weighing 416 grains.

Second. American Gold coins.

This is all we want, and it is much wanted.

The quantity of pure Gold in the eagle is that proposed by the committee of Congress, but the French standard, or $\frac{9}{10}$ fine, is adopted in the bill of the committee, and our old standard, (the same with British and Portuguese,) or $\frac{11}{12}$ pure, is preserved in the enclosed bill.

This is immaterial in itself, but to preserve what exists, as far as practicable, may prevent opposition and debate. The half and quarter eagles are, by the enclosed bill, of the same proportionate value, according to weight, as the eagle. The bill, as reported to Congress, proposes a deteriorated subsidiary Gold currency.

This is a project which, if defensible, is liable to so many objections, that to blend that subject with the mere raising of the legal value of gold to its market price would certainly defeat the bill.

THE MOTIVES FOR THE ADOPTION OF THE RATIO OF 16 IN PREFERENCE TO THE RATIO 15.62 IN 1834-'7.

The extracts reprinted in the following pages from the utterances of Mr. Thomas H. Benton, who held the leadership in Congress in the discussion of monetary questions at this period, and a table showing the production of the Gold fields of the Southern slopes of the Alleghanies in the years preceding 1834, taken together, will serve to suggest the controlling motives that presided at the rejection of the ratio of 15.62. The latter ratio was, as Mr. Benton himself admits, the "ratio of nearly all who were best calculated, from their pursuits, to understand the subject."

The style of forensic argument by which the reasoning of those who were "best calculated to understand the subject" was overruled, and the temper in which the question was met by those who commanded the majority, make themselves known in the extracts themselves. It may, however, be noted here that the extremely high ratio maintained in the Spanish and Portuguese countries (concerning which see pages 461 and 484), served the American advocates of the ratio of 16, in 1834, as an argument of the same purport as that which enabled the minister of Louis XVI in France to justify, in his own view, the adoption of the ratio of 15½ in 1785 (see page 257), while they ignored such views as those of Sir Isaac Newton in 1717, who, adverting to the existence at that date of the ratio of 16 in Spain and Portugal (see page 319), did not hold himself bound to pay homage to the policy of coining Gold Tokens which was pursued in the mine-owning States, but directed his view to the general ratio of equivalence established between the metals by the greater forces of the world's demand.

As for the table showing the yield of the Southern Gold fields (re-

printed in 1877 from the National Calendar of 1836), it suggests a motive, which, although not entirely available in public argument, may well have enlisted efficient support, for the highest practicable rating of Gold as compared with Silver. It would naturally be understood by all concerned that the elevation of the ratio must serve to enhance the profit, and hence, to further the development, of Gold-mining in the South.

Looking back upon the matter from the vantage-ground of to-day, it is not difficult to recognize that the object, if attainable in full measure, was well worthy of a national subsidy.

The introduction into the South of the varied industries, the movement and friction which successful mining might have brought in its train, were an object eminently to be desired in the interest, not merely of the South, but of the whole country. A great mining and manufacturing population in the Southern Alleghanies might have been a solvent of the "Southern question."

But, unfortunately, the sacrifice demanded was entirely disproportioned to the benefit that could arise from it. The difference between 16 and 15.62 is but 2½ per cent., and this was not a difference in the purchasing power of Gold—which alone can determine whether the search for it is profitable—but simply in its rating as compared with Silver.

The measure of the difference between the two ratios as they affected the profitableness of the Southern Gold mines must, therefore, be less than 2½ per cent. If a California had existed in the South, could it have been stifled by so small a difference. The event has proved that such an Eldorado did not exist, and, to continue the comparison, one may assert with confidence that the ratio of 15.62, had it been adopted, would not have suppressed the California of the Pacific Coast.

It is, indeed, too obvious to need extended discussion, that this premium, implied in the ratio of 16 as compared with the ratio of 15.62, neither brought, nor in the nature of things could have brought, any advantage approaching in importance those which were attainable through the ratio of 15.62.

The ratio of 15.62 meant substantial unity with France. Although in France the ratio of the coins was 15.50, the ratio of the coinage* between 1803 and 1835 was 15.69 while in 1835 the latter ratio gave place to 15.62.

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*MINT PRICE AND MINT RATIO IN FRANCE.

It is almost incredible to what an extent this important distinction has been neglected.

Distinguished authority could be cited for the use of an argument in favor of the opinion that "it is impossible to establish a fixed ratio between the metals" (see page 751), based upon the fact that "no sooner had the ratio of 15½ been established by the law of 1803 than the market rate in Paris went up above 15.50." But in fact it was eminently natural that it should do so, seeing that the moment a movement of the metals under pressure of foreign demand began to bring one or the other to the mint the comparison must arise between the cost of coining the one as compared with the

It is hardly necessary to advance arguments to show the importance of such substantial unity of our monetary laws with those which regulated the most important national epoch in Europe.

Passing by, therefore, the paramount question of the stability of exchanges, it is perhaps worth noting that had we maintained the same ratio as France, the drain of Silver after the Gold Discoveries might have come upon both countries at the same time, and the recoinage of Silver change, ordained in 1853, might not have been needed. Our old Silver change might have remained in use till the exigencies of war replaced it with paper.

But it is more recently that the nemesis of the error of 1834 reappears in full force. In the emergencies caused by the Demonetization of Silver, it would have strengthened the friends of the use of the two metals had the American ratio, which, after being neutralized and abandoned was again readopted for a limited coinage of Token Dollars, been identical with that of France. That the monetary armaments of the two countries, which by their history are committed to Bimetallic Money were not of the same caliber, was an element of confusion and of weakness when it became essential that their armies should be fused into one.

Having in 1834–'47 established a Gold unit that was too light, we see ourselves forced, if union with Europe at the rate of 15½ is ever to be attained, to reach it either by adding a percentage to the Gold Dollar, or by lightening the Silver monetary unit of Hamilton's day. But the policy of the adoption of 16 cannot be rightly judged unless we take an even wider view, and consider what would have been the result had Congress listened, not to the partisans of the anti-bank movement, nor to those who sought to mould to local ends, measures that in their character were inevitably international as well as national, but to "those who understood the subject."

The question naturally arises whether the substantial unity with France consequent upon the adoption of 15.62, might not in the course

cost of coining the other, and the equilibrium would tend to establish itself about the ratio given by cost of coinage.

In view of the misapprehension prevailing on this point, it may be well to call attention to the facts. The ratio of 15½ to 1 is a ratio between the Coins. The Silver in the Silver 5-franc piece weighs 15½ times as much as the Gold in the Gold 5-franc piece. This ratio has been maintained without alteration since 1803. The mint price, however, has undergone various changes. It was fixed in the law of 1803 at 9 francs per kilogram of standard Gold, 3 francs per kilogram of standard Silver.

The kilogram of standard Silver containing 200 francs, and that of Gold 15½ times as much, or 3,109 francs, the mint ratio stood as 3091:197, or 15.69+:1.

In 1835 the mint charge on Silver was reduced to 2 francs to the kilogram, that on Gold to 6 francs. The mint ratio became, therefore, 3094:198, or 15.626:1, and so remained till 1850.

In 1850 the mint charge on Silver was reduced to 1 franc 50 centimes the kilogram. The mint ratio became, therefore, 3094:198.50, or 15.586:1, and so remained until 1854.

In 1854 the mint charge on Gold was raised to 6 francs 70 centimes the kilogram. The mint ratio became, therefore, 3093.30: 19850, or 15.583: 1, at which rate it now stands.

of events have led to a closer assimilation; perhaps an identity of ratios of metals in the coin, and of charge for coinage, if not in the actual weight of the coins. Had such an International Bimetallic Union been in existence, Anglo-Saxon-American, as well as Latin, might not the Monetary Tournament of the Nations, that Field of the Cloth of Gold of 1867, have witnessed the victories of Bi-metallic rather than those of Mono-metallic Union?

The course of nations has its turning points, and they often consist of circumstances apparently trivial. 21 is a more convenient number in calculation than 20½, and therefore the guinea is rated at 21 shillings, and England abandons the Silver Standard of Elizabeth and cleaves to Gold. De Calonne, in 1785, and Gaudin, in 1803, omit to do what other statesmen under the circumstances would have done. They refuse to take 15; and the one establishes, the other ratifies, the ratio of 15½, and 15½ becomes the "normal" ratio of the nineteenth century.

Do not these examples warrant the inference that the early establishment of substantial unity of metal between the United States and France, might have changed the current of later monetary history?

TABLE OF THE AMOUNT OF GOLD RECEIVED ANNUALLY FROM THE GOLD REGION OF THE UNITED STATES FROM 1824 TO 1835 INCLUSIVE.

Years.	Virginia.	North Carolina.	South Carolina.	Georgia.	Tennessee.	Alabama.	Not ascertained.	Total.
1824	.....	$5,000	.....	.....	.....	.....	.....	$5,000
1825	.....	17,000	.....	.....	.....	.....	.....	17,000
1826	.....	20,000	.....	.....	.....	.....	.....	20,000
1827	.....	21,000	.....	.....	.....	.....	.....	21,000
1828	.....	46,000	.....	.....	.....	.....	.....	46,000
1829	$2,500	134,000	$3,500	.....	.....	.....	.....	140,000
1830	24,000	204,000	26,000	$212,000	.....	.....	.....	466,000
1831	26,000	294,000	22,000	176,000	$1,000	$1,000	.....	520,000
1832	34,000	458,000	45,000	140,000	1,000	.....	.....	678,000
1833	104,000	475,000	66,300	216,000	7,000	.....	.....	868,000
1834	62,000	380,000	33,000	415,000	3,000	.....	.....	898,000
1835	60,400	263,500	42,400	319,900	100	.....	12,200	698,500
	312,900	2,317,500	242,900	1,478,900	12,100	1,000	12,200	4,377,500

EXTRACTS FROM THE "THIRTY YEARS VIEW"
OF HON. THOMAS H. BENTON,

[VOL. I, CHAPTER CV, PAGE 436, 1834.]

REVIVAL OF THE GOLD CURRENCY.

MR. BENTON'S SPEECH.

"Mr. BENTON said it was now six years since he had begun to oppose the renewal of the charter of this bank, but he had not, until the present moment, found a suitable occasion for showing the people the kind of currency which they were entitled to possess, and probably would possess, on the dissolution of the Bank of the United States.

This was a view of the subject which many wished to see, and which he felt bound to give; and which he should proceed to present with all the brevity and perspicuity of which he was master.

I. In the first place, he was one of those who believed that the Government of the United States was intended to be a hard money Government; that it was the intention, and the declaration of the Constitution of the United States, that the Federal currency should consist of Gold and Silver; and that there is no power in Congress to issue, or to authorize any company of individuals to issue, any species of Federal paper currency whatsoever.

Every clause in the Constitution, said Mr. B., which bears upon the subject of money—every early statute of Congress which interprets the meaning of these clauses—and every historic recollection which refers to them, go hand in hand, in giving to that instrument the meaning which this proposition ascribes to it.

The power granted to Congress to coin money is an authority to stamp metallic money, and is not an authority for emitting slips of paper containing promises to pay money.

The authority granted to Congress to regulate the value of coin is an authority to regulate the value of the metallic money, not of paper.

The prohibition upon the States against making anything but Gold and Silver a legal tender, is a moral prohibition, founded in virtue and honesty, and is just as binding upon the Federal Government as upon the State Governments; and that without a written prohibition; for the difference in the nature of the two Governments is such, that the States may do all things which they are not forbid to do; and the Federal Government can do nothing which it is not authorized by the constitution to do.

The power to punish the crime of counterfeiting is limited to the current coin of the United States, and to the securities of the United States; and cannot be extended to the offence of forging paper money, but by that unjustifiable power of construction which founds an implication upon an implication, and hangs one implied power upon another.

The word currency is not in the constitution, nor any word which can be made to cover a circulation of bank notes.

Gold and Silver is the only thing recognized for money. It is the money and the only money, of the constitution; and every historic recollection, as well as every phrase in the constitution, and every early statute on the subject of money, confirms that idea.

People were sick of paper money about the time that this constitution was formed.

The Congress of the confederation, in the time of the Revolution, had issued a currency of paper money.

It had run the full career of that currency. The wreck of two hundred millions of paper dollars lay upon the land. The framers of that constitution worked in the midst of that wreck.

They saw the havoc which paper money had made upon the fortunes of individuals, and the morals of the public.

They determined to have no more Federal paper money.

They created a hard money Government; they intended the new Government to recognize nothing for money but Gold and Silver; and every word admitted into the constitution, upon the subject of money, defines and establishes that sacred intention.

Legislative enactment, continued Mr. B., came quickly to the aid of constitutional intention and historic recollection. The fifth statute passed at the first session of the first Congress that ever sat upon the present constitution, was full and explicit on this head.

It defined the kind of money which the Federal Treasury should receive.

The enactments of the statute are remarkable for their brevity and comprehension, as well as for their clear intrepretation of the constitution; and deserved to be repeated and remembered. They are: That the fees and duties payable to the Federal Government shall be received in Gold and Silver coin only; The Gold coins of France, Spain, Por-

tugal, and England; and all other gold coins of equal fineness, at eighty-nine cents for every pennyweight; the Mexican dollar at one hundred cents; the crown of France at one hundred and eleven cents; and all other Silver coins of equal fineness, at one hundred and eleven cents per ounce.

This statute was passed the 30th day of July, 1789—just one month after Congress had commenced the work of legislation.

It shows the sense of the Congress composed of the men, in great part, who had framed the constitution, and who, by using the word only, clearly expressed their intention that Gold and Silver alone was to constitute the currency of the new Government.

In support of this construction of the constitution, Mr. B., referred to the phrase so often used by our most aged and eminent statesmen, that this was intended to be a hard money Government.

Yes, said Mr. B., the framers of the constitution were hard money men; but the chief expounder and executor of that constitution was not a hard money man, but a paper system man! a man devoted to the paper system of England, with all the firmness of conviction, and all the fervor of enthusiasm.

God forbid, said Mr. B., that I should do injustice to Gen. Hamilton—that I should say, or insinuate, aught to derogate from the just fame of that Great man!

He has many titles to the gratitude and admiration of his countrymen, and the heart could not be American which could dishonor or disparage his memory.

But his ideas of Government did not receive the sanction of general approbation; and of all his political tenets, his attachment to the proper system was most strongly opposed at the time, and has produced the most lasting and deplorable results upon the country.

In the year 1791, this great man, then Secretary of the Treasury brought forward his celebrated plan for the support of public credit—that plan which unfolded the entire scheme of the paper system and immediately developed the great political line between the Federalists and the Republicans.

The establishment of a national bank was the leading and predominant feature of that plan; and the original report of the Secretary, in favor of establishing the bank, contained this fatal and deplorable recommendation:

"The bills and notes of the bank, originally made payable, or which shall have become payable, on demand, in gold and silver coin, shall be receivable in all payments to the United States."

This fatal recommendation became a clause in the charter of the bank.

It was transferred from the report of the Secretary to the pages of the statute book; and from that moment the moneyed character of the Federal Government stood changed and reversed.

Federal bank notes took the place of hard money; and the whole

edifice of the new government slid, at once, from the solid rock of Gold and Silver money, on which its framers had placed it, into the troubled, and tempestuous ocean of a paper currency.

[From page 443.]

Mr. B. said this was not the time to discuss the relative value of gold and silver, nor to urge the particular proportion which ought to be established between them. That would be the proper work of a committee. At present it might be sufficient, and not irrelevant, to say that this question was one of commerce—that it was purely and simply a mercantile problem—as much so as an acquisition of any ordinary merchandise from foreign countries could be. Gold goes where it finds its value, and that value is what the laws of great nations give it. In Mexico and South America—the countries which produce gold, and from which the United States must derive their chief supply—the value of gold is 16 to 1 over silver; in the island of Cuba it is 17 to 1; in Spain and Portugal it is 16 to 1; in the West Indies, generally, it is the same. It is not to be supposed that gold will come from these countries to the United States, if the importer is to lose one dollar in every sixteen that he brings; or that our own gold will remain with us, when an exporter can gain a dollar upon every fifteen that he carries out. Such results would be contrary to the laws of trade; and therefore we must place the same value upon gold that other nations do, if we wish to gain any part of theirs, or to regain any part of our own. Mr. B. said that the case of England and France was no exception to this rule. They rated gold at something less than 16 to 1, and still retained gold in circulation; but it was retained by force of peculiar laws and advantages which do not prevail in the United States. In England the circulation of gold was aided and protected by four subsidiary laws, neither of which exist here; one which prevented silver from being a tender for more than forty shillings; another which required the Bank of England to pay all its notes in gold; a third which suppressed the small note circulation; a fourth which alloyed their silver nine per cent. below the relative value of gold. In France the relative proportion of the two metals was also below what it was in Spain, Portugal, Mexico and South America, and still a plentiful supply of gold remained in circulation; but this result was aided by two peculiar causes; first, the total absence of a paper currency; secondly, the proximity of Spain, and the inferiority of Spanish manufactures, which gave to France a ready and a near market for the sale of her fine fabrics, which were paid for in the gold of the New World. In the United States, gold would have none of these subsidiary helps; on the contrary it would have to contend with a paper currency, and would have to be obtained, the product of our own mines excepted, from Mexico and South America, where it is rated as sixteen to one for silver.

All these circumstances, and many others, would have to be taken into

consideration in fixing a standard for the United States. Mr. B. repeated that there was a nicety, but no difficulty, in adjusting the relative value of gold and silver so as to retain both in circulation. Several nations of antiquity had done it; some modern nations also. The English have both in circulation at this time. The French have both, and have had for thirty years. The States of this Union also had both in the time of the confederation; and retained them until this federal government was established, and the paper system adopted. Congress should not admit that it cannot do for the citizens of the United States, what so many monarchies have done for their subjects. Gentlemen, especially, who decry military chieftains, should not confess that they themselves cannot do for America, what a military chieftain did for France.

Mr. B. made his acknowledgments to the great apostle of American liberty (Mr. Jefferson), for the wise, practical idea, that the value of gold was a commercial question, to be settled by its value in other countries. He had seen that remark in the works of that great man, and treasured it up as teaching the plain and ready way to accomplish an apparently difficult object; and he fully concurred with the senator from South Carolina [Mr. Calhoun], that gold, in the United States ought to be the preferred metal; not that silver should be expelled, but both retained; the mistake, if any, to be in favor of gold, instead of being against it.

[From Chapter CVIII, 1834.]

A measure of relief was now at hand, before which the machinery of distress was to balk, and cease its long and cruel labors; it was the passage of the bill for equalizing the value of gold and silver, and legalizing the tender of foreign coins of both metals. The bills were brought forward in the House by Mr. Campbell P. White of New York, and passed after an animated contest, in which the chief question was as to the true relative value of the two metals, varied by some into a preference for National bank paper. Fifteen and five-eights to one was the ratio of nearly all who seemed best calculated, from their pursuits, to understand the subject. The thick array of speakers was on that side; and the eighteen banks of the city of New York, with Mr. Gallatin at their head, favored that proportion. The difficulty of adjusting this value, so that neither metal should expel the other, had been the stumbling block for a great many years; and now this difficulty seemed to be as formidable as ever. Refined calculations were gone into: scientific light was sought: history was rummaged back to the times of the Roman empire: and there seemed to be no way of getting to a concord of opinion, either from the lights of science, the voice of history, or the result of calculations.

The author of this View had (in his speeches on the subject), taken up the question in a practical point of view, regardless of history, and calculations, and the opinions of bank officers; and looking to the

actual, and equal, circulation of the two metals in different countries, he saw that this equality and actuality of circulation had existed for above three hundred years in the Spanish dominions of Mexico and South America, where the proportion was 16 to one. Taking his stand upon this single fact, as the practical test which solved the question, all the real friends of the gold currency soon rallied to it. Mr. White gave up the bill which he had first introduced, and adopted the Spanish ratio. Mr. Clowney of South Carolina, Mr. Gillet and Mr. Cambreleng of New York, Mr. Ewing of Indiana, Mr. McKim of Maryland, and other speakers, gave it a warm support. Mr. John Quincy Adams would vote for it, though he thought the gold was over-valued; but if found to be so, the difference could be corrected hereafter. The principal speakers against it and in favor of a lower rate, were Messrs. Gorham of Massachusetts; Selden of New-York; Binney of Pennsylvania; and Wilde of Georgia. And eventually the bill was passed by a large majority—145 to 36. In the Senate it had an easy passage. Mr. Calhoun and Webster supported it: Mr. Clay opposed it: and on the final vote there were but seven negatives: Messrs. Chambers of Maryland; Clay; Knight of Rhode Island; Alexander Porter of Louisiana; Silsbee of Massachusetts; Southard of New Jersey; Sprague of Maine.

The good effects of the bill were immediately seen. Gold began to flow into the country through all the channels of commerce: old chests gave up their hordes; the mint was busy: and in a few months, and as if by magic, a currency banished from the country for thirty years, overspread the land, and gave joy and confidence to all the pursuits of industry. But this joy was not universal. A large interest connected with the Bank of the United States, and its subsidiary and subaltern institutions, and the whole paper system, vehemently opposed it; and spared neither pains nor expense to check its circulation, and to bring odium upon its supporters. People were alarmed with counterfeits. Gilt counters were exhibited in the markets, to alarm the ignorant. The coin itself was burlesqued, in mock imitations of brass or copper, with grotesque figures, and ludicrous inscriptions—the "whole hog" and the "better currency," being the favorite devices. Many newspapers expended their daily wit in its stale depreciation. The most exalted of the paper money party, would recoil a step when it was offered to them, and beg for paper. The name of "Gold humbug" was fastened upon the person supposed to have been chiefly instrumental in bringing the derided coin into existence; and he not to be abashed, made its eulogy a standing theme—vaunting its excellence, boasting its coming abundance, to spread over the land, flow up the Mississippi, shine through the interstices of the long silken purse, and to be locked up safely in the farmer's trusty oaken chest. For a year there was a real war of the paper against gold. But there was something that was an overmatch for the arts, or power, of the paper system in this particular,

and which needed no persuasions to guide it when it had its choice: it was the instinctive feeling of the masses! which told them that money which would jingle in the pocket was the right money for them—that hard money was the right money for hard hands—that gold was the true currency for every man that had anything true to give for it, either in labor or property: and upon these instinctive feelings gold became the avidious demand of the vast operative and producing classes.

MISCELLANEOUS.

THE RISE OF THE SILVER-PRICE OF GOLD BETWEEN 1770 AND 1830 AND ITS CAUSES.

The gradual elevation in the rating of Gold as compared with Silver has been adverted to from various points of view in the documents heretofore reprinted.

The table of the price of Dutch Ducats in Hamburg, for which science is indebted to the labors of Dr. Soetbeer, and which I have taken the liberty here to reprint at the close of this paper, shows for the period 1770–1780 an average of 14.64 and for the period 1820–1830 of 15.80, a difference of 8 per cent. The table compiled for Mr. Ingham in 1830 (see page 647) of market rates in London gives a percentage of difference equally as great. With all allowances for incorrectness of the latter table (see page 649) and for the lack of information concerning rates in other markets, one may fairly assume a general rise of about 8 per cent. to have occurred. I say *rise of Gold* not merely because one must say one of two things, either "rise of Gold" or "fall of Silver", and I choose the former, but because, as far as I can ascertain, the change of ratio was really a rise of Gold, not a fall of Silver. I am aware of no evidence that the general value of Money as shown by averages of price was less in 1820–1830 than it was in 1770–1780. Whatever scanty researches on this subject have come to my knowledge indicate a lower range of prices in the former than in the latter period. Under the circumstances it would be improper to assume a fall in the general value of Money in which Silver, the then principal material of Money, should, of the two, have taken the chief share.

There is, however, another ground for attributing the change of relation of the two metals at that period to a rise in Gold, and a conclusive one, which would not be effective if the question related to such a change

of relation occurring now. There is now in Money value more Gold than Silver in the civilized nations, while during the period in question the amount of Silver used as Money was something like three times as great as the amount of Gold so used. A change of ratio, therefore, is *a priori* referable to a mobility of the lighter, not of the heavier metal.

How was this rise of Gold, or, if it be preferred, this increase of difference between the metals, brought about?

Was it due to any alteration in the relative cost of production? So far as I am informed, history has nothing to say on this subject, and therefore theory cannot assume the existence of facts upon which alone it can be founded.

The amount of the metals brought to the market* show no such change of relative quantity as would enable the mere demand for Gold to be used in braid, gilding, and plate to force a rise in its price. As we compare the figures of production and ratios at different dates, remembering that the annual yield was a minute percentage of the stock of the precious metals on hand, it becomes evident that the causes of the rise must be sought, not in alteration of supply, but in alteration of demand for use as Money. There must have been an increased demand for Gold to be used as Money, or a diminished demand for Silver to be used as Money, or the respective demands must have been attached to a higher fixed price.

Was this surplus demand for Gold to be used as Money, or again, this demand at a fixed price a demand created by commerce alone, or a demand created by legislation?

Much may be said of a war demand for Gold as compared with Silver, and this war demand is credited to influences independent of legislation. Undoubtedly there is often a preference for the lighter metal, but the question is the measure of the preference. If the mere existence of a preference for Gold is to be *prima facie* decisive in the question, what causes a rise in the relative value of gold, there is no need of argument. Gold is the nobler metal; it has certain important advantages over Silver for all purposes, and it comes to us already with many times its weight in Silver. Hence for use as Coin, that is, with a reference to certain prices of things, it is far lighter, and hence more convenient, than Silver. Without discussing the merits of Silver, without entering into questions of habit, the advantage of heaviness, divisibility, the needs of cer-

* According to Dr. Soetbeer's lately published investigations (Edelmetall-Production, Gotha, 1879) the average annual product of the world was as follows:

Period.	Silver.	Gold.
	Kilograms.	*Kilograms.*
1761–1780	652, 740	20, 705
1781–1800	879, 060	17, 790
1801–1810	894, 150	17, 778
1811–1820	540, 770	11, 445
1821–1830	460, 560	14, 216

tain classes of the population, &c., we may for the sake of the argument admit there was in fact a preference for Gold, of which war demand was a part. But does this account for a rise of 8 per cent. in forty years?

Evidently *a priori* it has no more claim to account for a rise of 8 per cent. than for a rise of 1 or a rise of 20. The question is not the fact of preference, but the amount, the measure of preference. Does any one suppose, for example, that there was such a preference for Gold in England as would have prevented the use of Silver between 1798 and 1820, if the law had permitted it? Of course it would not be strange if many had assumed this to be the fact. Any one who knew that after 1800 Silver stood generally above 15.21, the English ratio, and while aware that there was little or no Silver in England, dated the English Single Gold Standard Law from 1816, must necessarily have assumed the existence of such a preference. (See in this connection page 346.) It is a curious fact that such an impression as this seems to have been instrumental in naturalizing the Gold-Standard theory on German soil.

I have been unable to avoid drawing this inference from the writings of the progenitor of the Gold movement in Germany. I refer to J. G. Hoffmann, a name justly honored in Germany, where his activity as First Professor of Political Economy in the University of Berlin; first Director of the Statistical Bureau, as a co-worker of Von Stein and Hardenberg as well as of a second generation of Prussian statesmen, gave authority to views which a later generation has sought to put into practice.*

Fully aware that after 1800 Gold, for the first time for a century, stood higher than the English ratio, Hoffmann does not seem to have been aware that the flow of Silver into England had been cut off; that although the Coinage of Silver was gratuitous and free by one law, another law had prohibited all Coinage of Silver. The conclusion was natural that the mere free will of "commerce," the mere preference of Englishmen for Gold as against Silver, and not their law-guided preference for the only Money the law allowed them, had led them to maintain Gold as their only standard metal.

But it is apparent to those who read the law of 1798-9 (see page 346) that a law was required to prevent Silver from being coined into debt-paying coin.†

* In a paper on "The Prussian Anti-Silver Theory and its Origin in an Error of Fact," extracts from which are printed in an Appendix to an Address on the "Monetary Situation" (Cincinnati, 1878), I have given citations from Hoffmann's Doctrine of Money and Signs of the Times (1838–1840), on which I base the inference above set forth.

† It is suggestive to note in this connection that Mr. Feer-Herzog, in his Report on the Conference to the Swiss Federal Council (see page 347), states that this law, to the existence of which I called his attention (see page 86), was an act of "mere form." It is but just, however, to add that in saying this the learned Delegate must have neglected the fact that the Statute for Free and Gratuitous Coinage of Silver as well as of Gold was in force in 1798; and also, perhaps, that the law of 1798 expressly stated that "there was reason to think that more Silver would come to the mint to be coined, and that therefore it was necessary to suspend the Coinage of Silver."

Indeed, even if one assume that the matter be regarded not with reference to the

This English preference for Gold required the re-enforcement of a law; but for that law the preference would have been overcome entirely, while, in spite of the law, millions of Spanish dollars were in use for a time. (See page 357.) Under the circumstances it does not appear that the preference was very strong. And yet England had been accustomed to Gold for three generations, and Englishmen are the most conservative of creatures of habit. Is it not, therefore, more than doubtful whether England's mere preference for Gold, unaided by legislation, could have raised its value one per cent.? And yet England's preference for Gold represents the then maximum force of "commerce" in this matter.

The forces of legislation on the other hand are forces that deal directly with great masses of metal, and fix rates of exchange for them on a grand scale. They do this not because they set in motion in the heart of the citizen a merely boyish predilection for the white or the yellow metal as a metal, or as being light or heavy, but because they act upon the entire current of that self-interest which is the great motive of the world's production and of the world's exchanges. In fixing what metal shall be legal tender, or in fixing the price at which two metals, or either of them, as the payer prefers, shall be legal tender, the legislator marshals the entire force of the self-interest of his nation and others dealing with it to increase the demand for the metal selected, or to hold the metal to the fixed price he would establish.

What, then, were the chief forces of legislation which were at work in this matter in the fifty years that center about 1800?

Let us review in order those which will naturally be regarded as specially active.

A.—The Coinage policy of Spain, making the ratio of 16 more or less effective.

B.—The recoinage of the louis in France in 1785 at 15½.

C.—The raising of the rating of Gold under the "Parallel Standard" in some of the German States. (Two Rhine Districts 1786, Austria 1793.)

D.—The various issues of paper Money in different countries.

E.—The withdrawal from Silver in 1798 of the privilege of becoming Money in England at 15.21, and its entire exclusion from Coinage.

F.—The establishment in France in 1803 of free Coinage of the two metals as full legal tender at a mint price of 15.69.

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facts, but with reference to a supposed set purpose to establish the Gold Standard and exclude Silver; that is to say, if we assume that Mr. Feer-Herzog meant that the law of 1798 was, not an act of "*pure form*," but a *foregone conclusion*, an error still remains.

The complaints of Lord Liverpool and of Mr. Magens of the lack of Silver Coin in 1804 and '5 (see page 357), and the fact that the law of 1816, which Mr. Feer-Herzog (in common with the majority of monetary writers) originally assumed as the starting point of the anti-Silver legislation of England, was compelled to repeal this law of 1798 in order to supply England with a fair share of Silver Tokens, show that the prohibition of Silver Coinage can hardly be accurately described even as a "foregone conclusion."

G.—The general destruction of paper currency.

H.—The replacement of paper with Gold in England in 1819–'21.

With the exception of D and G, which were comparatively neutral, all of these acts of monetary legislation tended to bring about a rise in Gold as compared with Silver, but in the case of E this tendency was limited to bringing Gold up to the fixed price of 15.69. For any movement beyond 15.69, E tended to keep Silver up and to keep Gold down.

According to the statement of De Calonne (see page 258), Spain, in 1779, raised her ratio 7 per cent. The fact seems doubtful, but if this be true the legislation of Spain tended to throw the weight of Spanish demand in favor of a rise in the ratio of many per cent. under any circumstances, and tended to fix Gold to Silver at 16 to 1.

This supposed fact justified De Calonne, as he maintained, in raising the French ratio from 14⅝ to 15½. It was a long time before this new legislation of De Calonne's, although it exerted influence over a metallic stock which was greater than that of any other nation, had its full effect on the market price of Gold. The 15½ of 1785 was a radically different thing from the 15½ of 1803. Coinage was not free, and only old French Coins were recoined. Moreover, political events and the issue of paper Money presently stopped all Coinage of Gold and reduced the Coinage of Silver. It is therefore in accord with the views heretofore stated that Gold, which was at about 15 in Paris in 1785 (see page 259), and which was rated at 14⅞ in 1790 (see page 281), should not have risen to 15½ until after the passage of the law of 1803 (see page 303).

But in England the rise above 15.21 did occur in 1798; it was this which caused Silver to be brought to the Tower to be coined (see page 346).

Henceforth Silver the world over was proscribed as a means of Money payment in England, while Gold was the more sought. Already the blow which the law of 1798 and '99 had struck, for Gold and against Silver, had made itself felt upon opinion, and in all probability it strengthened the hands of those who in 1803 preferred, as Calonne had in 1785, to put the ratio high enough that they might be on the safe side (see page 262).

In emerging, in 1803, from the feudal condition of Coinage, France, by making Coinage free at the mint rate of 15.69, brought the entire equalizing power of her great stock of the metals to bear upon their ratio, and thus tended to raise Gold permanently to 15.69.

The next two decades saw the general withdrawal of paper Money, and closed with the contraction of prices in England brought about by the resumption of cash payments in Gold. This increase of legislative demand for Gold naturally tended to raise its value relatively to Silver, while the general contraction of currency, accentuating the effect of a serious diminution, noted since 1810, of the annual yield of the mines, tended to cause a general fall of prices, and thus an increase of the purchasing power of both metals, but especially of Gold. It was here that the perfected Bi-metallic system of France, controlling as it did so

great a stock of metal, exerted its action to enable resumption of cash payments in England to be achieved with comparative success. Free Coinage in France, which at one time tended to raise Gold, now tended to prevent it from rising. A large proportion of the Gold England needed for resumption came from France, and in sending it France parted with a large proportion of her own stock. But with her free Coinage of Silver, she called the entire body of Silver in the world to the aid of European business to steady the exchanges, and replacing with Silver the Gold which she lost, she maintained for the common benefit a comparative steadiness in general prices. The forces set at work by England's anti-Silver legislation were thus opposed, and in part neutralized, by French legislation in an opposite sense, substituting Silver for Gold, while England, refusing to receive Silver, substituted Gold for paper.

But a residue of influence remained; the Bi-metallic legislation of France did not completely neutralize the Mono-metallic legislation of England.

The following estimate of that influence may be of interest. It comes from the pen of Professor Hoffmann, to whom I have lately alluded, one of the best men who have devoted attention to monetary questions in his country. In 1832, he wrote (in his Drei Aufsätze über das Münzwesen, Berlin, 1832) as follows:

> The facts before mentioned may serve as evidence how slight the fluctuations are to which the price of Gold is subjected through an increase or diminution of its employment.
>
> In the period of a single year, namely, 1821, the Bank of England drew from the Money markets of the whole world of trade a mass of 227,266 English troy pounds of Gold, 22 karats fine, equal to 332,326 marks of pure Gold, for the purpose of transforming them into English Gold Coins, which were to serve to carry on a trade that for twenty-four years had been carried on not with Gold but with paper.
>
> This mass was greater than four times the annual production from all the known Gold mines of the earth at the time of their fullest productiveness, before the breaking out of the disturbances in Central and South America. This mass was taken out of the circulation in the Money markets at a time when the mines, which had formerly been the most famous and fertile, had already for a series of years been offering a very much smaller yield. It was at the time a new demand to which this mass of Gold was to be applied. Every other hitherto customary demand for Gold remained by its side unaltered. No one of them, so far as is known, was at that time diminished.
>
> Notwithstanding this the strongest result which can be attributed to *this* purchase under *such* circumstances is that it brought the price of the mark of pure Gold from 15½ to 16 Marks pure Silver; and hence raised the price of Gold from 1 to 1.04918, that is to say 4.9 per cent., or, as we say, in our market, the Friedriich d'or, which a few years ago was bought for 5⅓ thalers, rose to something above 5 thalers and three-quarters.

The curious reader will have detected by the side of the soundness of this pithy characterization of the Prussian statesman a defect of analysis of facts which have lately become familiar.

Hoffmann is content with describing this marvelous steadiness of Gold in opposition to the obvious requirements of the law of supply

and demand, and leaves the reader to infer that this comparative steadiness is due to some incomprehensible quality in the yellow metal. The reason why he fails to account for it himself is, however, unconsciously revealed by him in his conscientious analysis of the state of existing demand. He says every other demand for Gold remained by the side of England's new demand unaltered; no one of existing demands, so far as it is known, was contemporaneously diminished.

And yet the demand for Gold in Double Standard countries? What sort of a demand was it?

It was something entirely different from this new English demand.

The new English demand was a demand for Gold under any circumstances without limit of Silver price. The demand of the Double Standard countries, on the contrary, was a demand for Gold *with a limit of price in Silver.*

Their demand in the sense of the desire of Frenchmen to use existing French Coins was a demand which could to a considerable extent be satisfied by giving them Silver Coins, old or new, in exchange for their Gold, and the Silver Coins were easily obtainable at the current rates.

As far as the mintage of new Coins is concerned, the demand of the United States was a demand for Gold at the price of 15 or less.

The demand of France for the mintage of new Coins was a demand for Gold at a price of 15.69 or less.

When Gold rose in the United States to 15 plus the cost of transportation to England, or in France above the rate of 15.69 with the same addition, the demand for Gold for Coinage ceased to exist, a demand for Silver arose in its place, and the demand of commerce for Gold Coin in circulation was reduced to a minimum which was unimportant in comparison.

It is thus apparent how far "every other demand for Gold remained by the side of England's new demand" unaltered; and how far it could rightly be said that "no one of existing demand was contemporaneously diminished."

"So far as was known," Hofmann was right. It was what he did not know that would have supplied the key to the problem which so rightly interested him. The key which he lacked was the Nature of Bi-metallic Legislation, which automatically altered and diminished the demand for Gold in proportion as England's new demand raised the Silver price of Gold above 15 or 15.69.

To return to the question propounded at the outset, it should be apparent that the active forces which brought about the rise of Gold between 1780 and 1830 were a succession of legislative acts inspired by a narrow, shortsighted policy, which succeeded only in complicating the monetary situation in the different states without achieving a substantial gain; for who could really gain by having Gold at 15.80 instead of 14.64? And also that a further rise of Gold was prevented by the equalizing influence of Bi-metallic Legislation, notably in France, which possessed an

exceptionally large stock of metal, and hence a proportionately preponderant influence upon the fortunes of the Precious Metals.

MARKET RATES OF SALES OF GOLD IN HAMBURG, 1700–1718.

It is a strange illustration of the slowness with which monetary science perfects itself that no one has thus far seconded the faithful labor with which Dr. Soetbeer, in 1855, completed his "Suggestions and Material for determining questions of Money and Banking, with special reference to Hamburg," by writing a similar history of the ratio of the Precious Metals in the great Markets of Paris or of London. Failing this, Dr. Soetbeer has found himself compelled in appending to his great work on the statistics of the Production of the Precious Metals (1879) a short examination of their market ratio to reprint alone his tables for Hamburg, given to the public a quarter of a century earlier. It is hardly probable, however, that the same certainty will be attained by research into the records of London or of Paris as can be assumed concerning the data furnished by Professor Soetbeer. The Hamburg tables are based upon official quotations, recorded under the direction of the *Handels Vorstand* of the city, *twice a week* since 1687. The average for a year, which is based upon exchanges made twice a week throughout the year, enjoys, of course, a solidity of foundation which it will be difficult for the commercial records of other cities to surpass. Since 1833, down, the London quotations have been recorded with great care, and they are adopted after that date by Professor Soetbeer, in the place of the Hamburg quotations. I reproduce here only the yearly averages from 1700 to 1832.

Tables of the average rates of exchange of Gold to Silver in Hamburg.

[From Dr. Adolf Soetbeer's Edelmetall-Production, Perthes, Gotha, 1879.]

Year.	Relation of gold to silver.	Year.	Relation of gold to silver.
1691—1700, average	14, 96	1719	15, 09
		1720	15, 04
1701	15, 07		
1702	15, 52	1711—1720, average	15, 15
1703	15, 17		
1704	15, 22	1721	15, 05
1705	15, 11	1722	15, 17
1706	15, 27	1723	15, 20
1707	15, 44	1724	15, 11
1708	15, 41	1725	15, 11
1709	15, 31	1726	15, 15
1710	15, 22	1727	15, 24
		1728	15, 11
1701—1710, average	15, 27	1729	14, 92
		1730	14, 81
1711	15, 29		
1712	15, 31	1721—1730, average	15, 09
1713	15, 24		
1714	15, 13	1731	14, 9[illegible]
1715	15, 11	1732	15, [illegible]
1716	15, 09	1733	15, 18
1717	15, 13	1734	15, 39
1718	15, 11	1735	15, 41

Tables of the average rates of exchange of Gold to Silver in Hamburg—Continued.

Year.	Relation of gold to silver.
1736	15, 18
1737	15, 02
1738	14, 91
1739	14, 91
1740	14, 94
1731—1740, average	15, 07
1741	14, 92
1742	14, 85
1743	14, 85
1744	14, 87
1745	14, 98
1746	15, 13
1747	15, 26
1748	15, 11
1749	14, 80
1750	14, 55
1741—1750, average	14, 93
1751	14, 39
1752	14, 54
1753	14, 54
1754	14, 48
1755	14, 68
1756	14, 94
1757	14, 87
1758	14, 85
1759	14, 15
1760	14, 14
1751—1760, average	14, 56
1761	14, 54
1762	15, 27
1763	14, 99
1764	14, 70
1765	14, 83
1766	14, 80
1767	14, 85
1768	14, 80
1769	14, 72
1770	14, 62
1761—1770, average	14, 81
1771	14, 66
1772	14, 52
1773	14, 62
1774	14, 62
1775	14, 72
1776	14, 55
1777	14, 54
1778	14, 68
1779	14, 80
1780	14, 72
1771—1780, average	14, 64
1781	14, 78
1782	14, 42
1783	14, 48
1784	14, 70
1785	14, 92
1786	14, 96
1787	14, 92
1788	14, 65
1789	14, 75
1790	15, 04
1781—1790, average	14, 76
1791	15, 05
1792	15, 17
1793	15, 00
1794	15, 37
1795	15, 55
1796	15, 65
1797	15, 41
1798	15, 59
1799	15, 74
1800	15, 68
1791—1800, average	15, 42
1801	15, 46
1802	15, 26
1803	15, 41
1804	15, 41
1805	15, 79
1806	15, 52
1807	15, 43
1808	16, 08
1809	15, 96
1810	15, 77
1801—1810, average	15, 61
1811	15, 53
1812	16, 11
1813	16, 25
1814	15, 04
1815	15, 26
1816	15, 28
1817	15, 11
1818	15, 35
1819	15, 33
1820	15, 62
1811—1820, average	15, 51
1821	15, 95
1822	15, 80
1823	15, 84
1824	15, 82
1825	15, 70
1826	15, 76
1827	15, 74
1828	15, 78
1829	15, 78
1830	15, 82
1821—1830, average	15, 80
1831	15, 72
1832	15, 73

FREE COINAGE AND GRATUITOUS COINAGE IN FRANCE AND ENGLAND.

FREE COINAGE AND GRATUITOUS COINAGE.

By Freedom of Coinage is implied the right of the public to have whatever good metal it brings to the mint coined as soon as possible into Legal Tender Money. Beyond the demand of the public, therefore, the only limit to the transformation of metal into Money lies in the time required to effect the transformation. A certain length of time will of course be required in any case, and the amount will depend upon the relation of the capacity of the mint to the demand made upon it.

Gratuitous Coinage means, on the other hand, that the individual pays nothing for Coinage; one leaves his Bullion at the mint, and as soon as practicable receives the full weight of it in coin.

England first and alone among nations made Coinage both gratuitous and free. It was the act for encouraging Coinage, 18 Car. II, c. 5 (reprinted on page 309), which inaugurated this important change. This statute, repeatedly re-enacted, was made perpetual in 1768, was practically abrogated only so far as Silver was concerned in 1798, and to that extent repealed in 1816, while in 1870, though repealed formally, it was re enacted in substance. In England, therefore, the Coinage of Gold remains to-day gratuitous and free.

In France, on the other hand, the department of Coinage remained till a much later day in the feudal condition, as a part of the prerogative of the King, never subjected to that control which in England the Parliament, encroaching upon the admitted *Jura Majestatis*, had gradually assumed. (See the Prayer of Parliament and Proclamation of the King in 1717, page 316.) Coinage was not only subject to cumbrous

and complicated machinery of management, but was at the mercy of narrow interests. For a few years, it is true, under the initiative of one of her greatest statesmen, Coinage became in France both gratuitous and free.*

Colbert's proclamation telling the French who brought metal to the mint that they should receive it back in Coin, weight for weight, fineness for fineness, was in force for a number of years. But, of course, neither free Coinage nor gratuitous Coinage became, through this fact, a right of the people.

It was not till the Revolution that having Bullion made into Money was regarded as a right. To-day it is well known that Coinage is free in France, although it is not gratuitous. But upon inquiry what the charter was which secured to the citizen this privilege of free Coinage, I found that the matter was somewhat obscure. Although the law of the 7 Germinal, year XI, which is the *Magna Charta Monetaria* of France, does not in express terms guarantee freedom of Coinage, no occasion appears to have arisen where the right has been contested, and hence tested; but it would appear probable that if a conflict should ever arise as to whether the administration had a right to refuse to coin, it could be settled in favor of the citizen by reference to a law of the 28 Thermidor, year III, which declares that persons who shall carry Gold or Silver to be exchanged at the mint shall receive the value thereof, in conformity to the law of the year II, which established the *grave* as unit. (See page 295.)

A subsequent Resolution of the Council of Elders went further than this, and made Coinage not only free but gratuitous; abandoning the mint charge, fixed 16 Vendémiaire, year II, at 1 per cent. for Silver and ½ per cent. for Gold. (See page 296.) It would appear, therefore, that the "Hercules" five-franc pieces of that day, the chief Coins of the First Republic, and which are still found in circulation, were coined at the expense of the Republic. I am not aware that the question of returning to the precedent thus established has attracted much attention in France. That the right of free Coinage, however, is not regarded with indifference in France was instanced in an agitation which in 1842 and

* A declaration of Louis XIV of 1679 is as follows:

Declaration making general regulation concerning the Coin.

(1679.)

LOUIS, *etc., etc.*

* * * * * * *

[The proclamation proceeds to decry certain Coins—that is to say, it forbids all persons to deliver or receive them by tale on pain of confiscation and 1,000 livres fine.]

* * * * * * *

To this end we ordain that those who hold foreign specie of Gold and Silver, and others above mentioned (of French Coinage), shall be compelled to bring them to our mints, in which the exact value shall be returned, value for value, fineness for fineness, to those who, in three months, shall bring the above-mentioned "decried" Coins to be recoined into Coins of Gold or Silver of the fineness and weight established by our edict and declaration of 31 March, 1640, and September, 1641.

1843 assumed some importance. A bill was proposed looking to the centralization of the mint management, &c., and the idea was expressed that artificial means were being used to stimulate unduly the manufacture of Coin for the benefit of the coiners; but the project was rejected, after animated debate.

Some years since, in England, a movement to compel the manufacture of Silver Coin, the supply of which was said to be deficient, led to some discussion of the relative rights of the individual and the Crown in obtaining the services of the Mint in the manufacture of Silver Tokens.

If the policy of the United States looking toward concurrent action of the nations in the use of Bi-metallic Money should come to be adopted, the question of variance between the mint charges in the different nations would assume importance. In England the agitation set on foot in connection with the Conference of 1867 looked to a harmony of Coinages through the general adoption of a 25-franc Gold piece, and the party of Monetary Union were ready to that end to abandon the principle of the Act of 18 Charles II, and to bring down the weight of the sovereign to that of a 25-franc piece by a mint charge of about one per cent. (See page 384.) Mr. Rivers Wilson, the Secretary of the Parliamentary International Coinage Commission of 1868, introduces, in the valuable appendix of that report, extracts from the opinions of some political economists favoring seigniorage.

Whether the interests of the nations demand that the cost of mintage should be borne by the public or by the individual bullion-owner is a question of importance which has hardly been satisfactorily settled.

But it should be agreed, in any event, that even if one of these courses were decidedly preferable to the other, the nations could afford to sacrifice this preference for the sake of harmony.

If nations could agree either upon the same mint charge, or upon the absence of all mint charge, either alternative would be preferable to the present conflict of policy in this regard.

THE CONCURRENT CIRCULATION OF THE TWO METALS IN FRANCE, UNDER THE RATIOS OF 14⅝ AND OF 15½.

In his second Report on Money, 1803, Gaudin, the French Minister of Finances, under whose guidance the present Monetary System of France was established, says:

"It has always been thought that the relative value of the two metals ought to be regulated in such proportions to those established in neighboring countries, that the exportation of one or the other metal can offer no bait to the cupidity of speculation."

It was mainly with a view to secure this *concurrent* circulation of the metals that the various French ratios were established, but in two instances, as Gaudin observes, the intention seems to have been to give Gold a slight preference over Silver; namely, in 1640 and in 1785; while in the intervening period, in 1726, the selection of a new ratio was made with the impartiality to which, according to Gaudin, the choice made in 1785–1803 can not lay claim. In 1640, Germany and Milan observed the ratio of 12; the Low Countries and Flanders, 12½; England, 13⅓; Spain, 13⅓; and France established the ratio of 13¾. In 1726, the ratio of 14⅝ was established, which remained in force until 1785, when, for the reasons given on page 257, De Calonne recoined the French Gold coins at a rating considerably above their market value.

Under the ratio of 1726, 14⅝, it appears that France enjoyed in full measure the desideratum of concurrent circulation, which during that period was denied to England by her high ratio of 15.21.

De Calonne says that during a long course of years (*pendant de longues années*) after 1726, France "kept in circulation a sufficient quantity of either metal."

In alluding to the fact that the rating of Gold in 1726 was low, Gaudin observes (in his report) that between 1726 and 1785 no inconvenience was observed from the difference until the disappearance of Gold took place, which he implies must have become noticeable only shortly before the latter date. He repeats that the failure in 1726 to overrate Gold had not produced any sensible effect (loss of Gold) in the period of sixty years.

In the nineteenth century France has occupied a monetary position differing in important respects from that she held in the eighteenth. At the close of the latter England surrendered her Bi-metallism in Europe; and France, adopting an English idea, inaugurated liberty of coinage, without, however, making coinage gratuitous, but reducing the mint charge to the actual cost of coinage.

In the mean time the United States have gradually assumed the monetary importance which a hundred years ago belonged to Spain and Portugal; but maintaining as they do a stock of metal equal to but a fraction of the French, and far inferior to the English stock, their free Bi-metallism being at ratios conflicting with the French, has not, even in proportion, aided that country in maintaining the steadiness of the relative value of the metals.

The events most calculated to disturb the par guaranteed by French free coinage of both metals as full legal tender were the resumption of specie payment in England in 1816–1823, causing a great demand for Gold; the adoption of the ratio of 16 in the United States, 1834–37, which caused a replacement of Silver by Gold; and the influx of Gold from California and Australia (1848–1860), which was so great as to cause not only a depreciation of Gold as compared with Silver, but a sensible depreciation to a greater degree in the general value of money as expressed in the averages of price in the civilized world.

Asia, not accepting Gold as money, naturally took its portion of this metallic inflation in the Silver which the Western World, rich in new Gold, was ready to export.

The concurrent circulation which Gaudin aimed at in 1803 was not, therefore, obtained in complete equality, under the presence of the drain of Gold before 1830 to England, and before 1850 to the United States, and the drain of Silver after 1850 to the East.

For some time before 1850 Gold circulated in France chiefly at a premium, but when the years reached 1860, France, parting with much of her Silver in exchange for Gold, felt the same drain of Silver change under the ratio of 15½ which, under the ratio of 16, had, in 1853, compelled the coinage of Silver tokens in the United States.

It is often asserted that between 1855–1865, France was deprived of the *concurrent* circulation of the two metals, Silver disappearing entirely, so that her Double Standard led to a complete *alternation* of the metal in circulation. The investigation, however, into the French circulation, made under the direction of the French Ministry of Finances in

August last (Exhibit A, 7th session, page 172), reveals facts which oppose this assertion. Out of 824,987 5-franc pieces which were found in the offices of account, (19,511 in number) of the administration of the French Treasury, 517,700 had been coined before 1851. If the same percentage (.62) holds good of the entire French stock of 5-franc pieces, native and foreign (which of course cannot be affirmed with certainty), it would appear that France holds to-day perhaps 300 millions of French dollars, coined before the drain of Silver commenced for France, or about 30 per cent. of her total coinage of these dollars since 1795. Has any large part of this stock been held as coin in Eastern countries and now been returned to France? Did a large proportion of these dollars serve as money in spite of the premium of 1, 2, 3, or even 4 per cent. which was sometimes paid for Silver in the metal-market exchanges between 1851 and 1865, or did they circulate at a premium over Gold? In any case it appears that the assertion that the alternation of metal was complete is hardly justified. It is, however, but just to recall that, in all probability, these elder coins had lost some fraction of weight by wear; and hence offered less profit for recoinage into rupees than the newer coins. It is also probable that the presence of these old dollars is an indication of a late event of considerable interest in the economic history of France. It has been asserted that, in late years, the habits of the French people in the matter of hoarding have undergone a change; that in the country districts the small farmers, instead of hoarding their dollars, invest them. The popular subscription for the national debt for the war with Germany, and the, for France, unfamiliar presence of bank-notes in the country circulation since the war, may naturally be credited with diminishing the habit of hoarding. Whether the change of habit has really gone so far as effectively to mobilize a large proportion of the hoards of France has not been ascertained.

MONETARY PROPOSITIONS OF SIR JAMES STEUART.

[Extract from his Inquiry into the Principles of Political Œconomy, Book III, Chap. IV.]

METHODS WHICH MAY BE PROPOSED FOR LESSENING THE SEVERAL INCONVENIENCES TO WHICH MATERIAL MONEY IS LIABLE.

I. In this chapter I shall point out the methods which may be proposed for lessening the inconveniences to which all Coin is liable, in order thereby to make it resemble as much as possible the invariable scale of ideal Money of accompt.

To propose the throwing out of Coin altogether, because it is liable to inconveniences, and the reducing all to an ideal standard, is acting like the tyrant who adjusted every man's length to that of his own bed, cutting from the length of those who were taller than himself, and racking and stretching the limbs of such as he found to be of a lower stature.

The use of theory in political matters is not merely to discover the methods of removing all abuses, it must also lend its aid towards palliating inconveniences which are not easily cured.

The inconveniences from the variation in the relative value of the metals to one another, may in some measure be obviated by the following expedients.

First, By considering one only as the Standard, and leaving the other to seek its own value like any other commodity.

Secondly. By considering one only as the Standard, and fixing the value of the other from time to time by authority, according as the market price of the metals shall vary.

Thirdly, By fixing the standard of the unit according to the mean

proportion of the metals, attaching it to neither; regulating the Coin accordingly; and upon every considerable variation in the proportion between them, either to make a new Coinage, or to raise the denomination of one of the species, and lower it in the other, in order to preserve the unit exactly in the mean proportion between the Gold and Silver.

In order to explain this thought, let me observe, that the consequence of every variation in the proportion between the value of Gold and Silver has this effect; namely, that the same weight of Silver acquires upon every change a different value in Gold, from what it had before; and the same weight of Gold acquires upon the change, a different value in Silver from what it had before. Let me illustrate this by an example. Suppose, then, the value of Gold to be to the value of Silver, as 1 to 14; then 100 grains of Gold will be worth 1400 grains of Silver. Suppose, that next year, the proportion shall change, and that it shall come to be as 1 to 15; then 100 grains of Gold will be worth 1500 grains of Silver. Here then, are two different values in Silver for the same quantity of Gold, namely, at one time 100 grains Gold = 1400 grains Silver; at another time 100 ditto = 1500 ditto. Add these two quantities of Silver together, they make 2900 grains. Take one half of the sum, or 1450. this I call the mean proportion of the Silver.

On the other hand, as to the Gold;

	Grs. of Gold.
1400 grs. Silver at one time are worth	100
1400 grs. ditto at another time are worth $\frac{1400}{1500}$ or	$93\frac{1}{3}$
Together	$193\frac{1}{3}$

one half of which is $96\frac{5}{6}$ grs., or the mean proportion of the Gold.

Supposing, therefore, the unit to have been determined at 100 grs. of gold, and at 1400 grains of Silver, as soon as the proportion comes to 15 it must be changed to $93\frac{5}{6}$ grs. of Gold, and to 1450 grs. of Silver.

This shall be fully explained and the usefulness of it pointed out in the XIII and XVth chapters.

Fourthly, To have two units and two standards, one of Gold, and one of Silver, and to allow everybody to stipulate in either.

Fifthly, or last of all, To oblige all debtors to pay, when required, one-half in Gold and one-half in the Silver Standard.

I have here proposed the attaching the Standard to one of the species, as a remedy against the effects of variation between the metals, because when this is done, the consequences are not so hurtful as when the unit is affixed to both, as I shall prove in its proper place.

The regulating the proportion of that metal which is considered as merchandise, to the other which is considered as the standard, upon every variation in the market price of Bullion, as well as the other expedient of establishing two units, the one of Gold, and the other of Silver, does not render the unit of Money any more invariable than before; all that can be said for this expedient is that Money becomes thereby more

determinate, and that people who enter into permanent contracts are, at least, apprised of the consequences of the varying of the proportion of the metals, and may regulate their interests accordingly.

Fixing the Standard to the mean proportion of the metals is a certain method of preserving the value of the unit invariably in time to come; but, upon subsequent variations in the proportion, it implies either the necessity of a recoinage, or of changing the denominations of the coin by which fractions of farthings, deniers, and other such small denominations will be incurred, unless such a duty upon Coinage be imposed as may raise the value of the Coins above that of common Bullion, beyond the value of such fractions of farthings, &c., which then may be thrown out. Example upon changing the denomination of a shilling; Supposing the exact proportion of its new denomination should be 12.28*d.*; the legal denomination may be made 12¼*d.*, which is 12.25*d.*, and the three additional hundredth parts of a penny may be neglected, because the duty on Coinage will give an advanced value to the shilling price beyond the three hundredth part of one penny, which, as a *metal*, it will have more than in proportion to its denomination.

The last expedient of making debtors pay half in Gold and half in Silver, would remove every inconvenience, provided that a similar regulation were made at the mint and at the Bank of England, appointing all Bullion to be delivered in both species at the mint; and all payments to be made in both species at the Bank: and also provided that the same regulation should be observed in all bargains of sale as often only as required. This would so blend the value of the two metals together as to make them virtually but one.

II. The other imperfections of Coin have been already enumerated. They relate either to its wear, to the want of exactness in the fabrication, to the price of Coinage, or to the opportunity thereby afforded to Princes to adulterate and change the standard.

First. As to the first, the best expedients are to strike the greatest part of the Coin in large solid pieces, having as little surface as possible, consistently with beauty and ease of fabrication.

To order large sums (of Silver at least) to circulate in bags of determinate sums and determinate weights, all in pieces of the larger denominations.

And to make all light Coin whatsoever go by weight, upon the requisition of the person who is to receive it.

Secondly. As to the inaccuracy of the fabrication, there is no other remedy than a strict attention in Government to a matter of so great consequence.

Thirdly. The price of Coinage principally affects the interest of nations with regard to foreign trade; consequently, trading States should endeavor, as nearly as possible, to observe the same regulations with their neighbors, in everything which regards the Coin. The consequences of this inconvenience to those within the society are unavoidable, and therefore no remedy can be proposed.

Fourthly. The establishment of public credit is the best security against all adulterations of the standard. No fundamental law can bind up a Prince's hands so effectually as his own interest.

While a Prince lives within his income, he will have no occasion to adulterate the coin; when he exceeds it, he will (in a trading nation) have recourse to credit, and if once he establishes this, he must give over meddling with the standard of his Coin, or he will get nobody to lend him any more. The only Prince who can gain by adulterating the Standard is he who seeks for extraordinary supplies out of a treasure already formed.

These are, briefly, the expedients to be put in practice by those Governments which have the prosperity of their subjects at heart. The infinite variety of circumstances relating to every State can alone decide as to those which are respectively proper to be adopted by each. Our business at present is to point out the variations to which the value of the Money-unit is exposed, from every disorder in the Coin; and to show that as far as the value of the unit shall be affected by them, so far must material Money in such a case be defective.

THE THEORY OF MONOMETALLISM IN 1802.

A FEW BRIEF EXTRACTS FROM THE SECOND REPORT OF CITIZEN BERENGER ON COINAGE.

[Berenger's two Reports are classics in French monetary literature. Berenger has not been surpassed in force of reasoning nor in felicity of statement, by any of the distinguished men who, in the France of this generation, have been the continuators of the ideas which Berenger sought to embody in legislation. Opposed to the Double Standard, he presents in luminous style the armament of argument for unity of Standard, and indeed far surpasses in the merely intellectual qualities of leadership his venerable contemporary Lord Liverpool, who had successfully prevented the restoration of Silver to circulation in England at the time when Berenger was vainly seeking to exclude Gold from Legal Tender in France.

The few brief extracts from his second report which follow, by no means adequately present the course of his reasoning, but are selected merely with the view of indicating an interesting source of those peculiar exaggerated doctrines of the powerlessness of legislation to affect the value of Money (see page 742), which, owing to a combination of events which gave a peculiar direction to the economic thought of the century, were, so to speak, unwittingly absorbed into monetary science and received political sanction as the basis for practical measures at the hands of the Conference of 1867.

Side by side with these 'half truths' the reader will find 'whole truths' crystallized in pellucid language—very diamonds of doctrine.]

EXTRACT FROM THE SECOND REPORT ON COINAGE.

Citizen BERENGER, reporter.

"The consuls have directed the Section of Finance to submit to the discussion of the Council of State a series of questions concerning the Coins.

"The following appear to us the more important:

"The monetary unit, shall it be represented by a single metal or by several metals; by a quantity of Gold and Silver equally variable, or by a fixed quantity of Silver and a variable quantity of Gold?

"2d. The monetary unit being represented by a single metal, to which shall this preference be accorded?

"3d. Shall the cost of mintage be at the expense of the state?

"4th. Shall the law fix a tolerance of weight, a tolerance of fineness, and a tolerance of wear?

"5th. Shall it, in fixing upon a Coin, subordinate the value of Gold Coins to their weight or their weight to their value?

"6th. Shall copper Coins be struck with an alloy of Silver?

"7th. Shall the monetary function of the copper Coins be limited to fractions of a franc?

* * * * * * *

"FIRST QUESTION.

* * * * * * *

"I conclude from these observations:

"1st. That the use of Money is the necessary result of the division of labor as the division of labor is the result of exchange.

"2d. That in this department, as in all others, legislation has sometimes perfected, sometimes degraded this custom (the use of Money), but that it did not introduce it.

"3d. That the choice of the merchandise to be used as Money does not lie in the free will of the legislator.

"4th. That the value of Money is founded upon that of the material used as Money, and that the enhancement of value which it receives through the employment in this new use is not limited to that portion of it which performs the function of Money.

"5th. That Money is not useful except as it multiplies exchanges, and that the principal object of monetary legislation should be to perfect this property of Money.

"It is in this connection, and in this connection alone, that monetary legislation is actually important.

"I believe that I can establish as principles:

"1st. That the utility of Money consists in the property which it has of facilitating and multiplying exchanges.

"2d. That Money is more favorable to the multiplication of exchanges as its value is the more invariable.

"3d. That the value of Money is independent of the will of the legislator.

"4th. That the determination of values being by its nature outside of the domain of the law, the legislator ought to limit himself to taking all possible precautions to render the appreciation of values more easy and sure.

"If the precious metals generally perform the office of Money it is not because of an agreement to assign this function to them, it is because they are fitter for it than any other commodity.

"If one metal has been employed rather than another metal, or than various metals at the same time, still it was the need (of commerce) and custom which determined legislation, and they have pronounced against it when legislation has neglected to conform itself to them.

[See page 299.]

* * * * * * *

"It is, therefore, neither by order, nor by agreement, nor by chance that Gold and Silver are Money, but by fitness, because no other commodity is as favorable to the multiplication of exchanges as are the precious metals. In a word they are Money by the force of events, which always and necessarily controls all efforts opposing it. Of all the qualities which assure to Gold and to Silver the character of Money, fixity of value is the most essential; and hence the first monetary laws had for their object to assure the value of Money."

[It is interesting to recall in the presence of the august half-truths concerning the relation of legislation to Money which are so worthily presented by this distinguished monetary legislator, that contemporary history of his own country presented to seeing eyes that complement of truth contained in facts, for want of which his doctrinaire statement of principles is one-sided.

Legislation had, in 1785, induced a transshipment of the valuations of France from Gold and Silver at $14\frac{5}{8}$, at which legislation had held them for half a century, to Gold and Silver at $15\frac{1}{2}$ to 1.

The influence of demand for the two metals for Coinage in France, to the limited extent to which it was active in the period which intervened between 1785 and 1802, was exerted in favor of a general rise in the value of Gold up to but not beyond $15\frac{1}{2}$. The monetary legislators of France had in the mean time partially succeeded for a time in transshipping the valuations of France from Gold and Silver to a commodity of stamped paper easily counterfeited, and unprovided with any firm attachment to other existing Instruments of Valuation.

The partial success of this legislative movement having worked great disaster, Gold and Silver, which had always remained Money concur-

rently with paper, again became, at various ratios between the metals, candidates before the French Legislator for adoption as the basis of French valuations. Berenger desired legislation in favor of one of those metals, and the very zeal with which he took part in discussing monetary legislation was a satire upon the doctrines with which he proclaimed the impotence of legislation to affect the value of Money.]

THE GERMAN COMMERCIAL CONVENTION.

BERLIN, 1868.

[Extract from the Report of the Proceedings of the Fourth German Commercial Convention (*Handelstag*) held at Berlin between the 20th and 23d October, 1868. 4to., 147 pp. Berlin, 1868.]

[One hundred and nineteen German cities were represented in this Convention. The organization of the earlier *Handelstag* has been kept up by a Permanent Committee of fifteen, of which Dr. Adolf Soetbeer, of Hamburg, whose literary activity in monetary matters began in 1846, was a prominent member. The following resolution was presented by him as Official Reporter on the question of the Standard at the first session, and was debated at length and adopted at the following session. It will be apparent upon consideration of the resolutions, that that basis of public favor which made it possible for the German Parliament in 1871 and 1873 (see page 759) to establish the Gold Standard, was the artificial product of an ably-directed, perseveringly-pursued, literary agitation which disseminated among the business men throughout Germany an enthusiasm for the principles identified with the name of Dr. Soetbeer and with the Conference of 1867.]

Inasmuch as the measures recommended by the First German Commercial Convention, in Heidelberg, May, 1861, and by the Third Commercial Convention, in Frankfort-on-the-Main, September, 1865, for the purpose of securing monetary unity in Germany, have not met with earnest attention or practical acceptance at the hands of the German Governments, and as there are no signs that such attention or acceptance will be accorded to them; and inasmuch as a plan of a Universal Inter-

national Monetary Union on the basis of the Gold Standard has been elsewhere adopted with zeal, and is being pursued with perseverance; and especially inasmuch as the proceedings of the International Monetary Conference which met in Paris in the year 1867, in which also the Plenipotentiaries of Prussia and of other German States took part, have now been made known, the German Commercial Convention in its present fourth assembly pronounces itself to the following effect:

1. The speedy attainment of a practicable monetary unity in all German States is now, as formerly, regarded as exceedingly important and desirable.

2. As far as the special scheme of the future unified German monetary system is concerned, the propositions for a unified reckoning by marks (thirds of a thaler), the Silver Standard being retained, which was abandoned by the Conventions of 1861 and 1865, are withdrawn, and, on the contrary, the following recommendations are made:

3. Monetary unity, and at the same time such a general monetary reform as befits the age, can be brought about by the adoption, at the same time, by all the German States of the *Single Standard with full application of the Decimal System*, in pursuance of the principles recommended by the International Monetary Conference of Paris in its report of the 6th July, 1867.

4. As far as relates to the future German monetary system after the adoption of the Gold Standard, special notice is directed to the proposition to introduce unit of value and of account equivalent to the *Gold five-franc piece* with its decimal multiples and its division into 100 shillings, or to adopt for a unit of account the gulden as the tenth part of a principal Gold Coin identical with the 25-franc piece, and divided into 100 kreuzers.

The Commercial Convention, in presenting a collection of written opinions concerning the transition to the Gold Standard, and the proceedings of the present meeting, petitions the August Presidency of the North German Confederation, as well as the August Governments of Bavaria, Württemberg, Baden, and Hessen, without delay to take appropriate measures in order that a uniform monetary system of the kind before mentioned may be agreed upon, and as soon as possible be laid before the North German Diet and before the Legislatures of the South German States for their acceptance in constitutional form, in order that, if by any means it be practicable, the monetary reform may take effect, at the latest, on January 1, 1872, at the same time with the new System of Weights and Measures, which already has been published as law in the States of the North German Confederation, the early adoption of which in the South German States is also strongly to be desired.

The Permanent Committee is herewith authorized to adopt such measures as may be necessary to further the object of the pending resolution.

THE SALE OF SILVER AND THE STOCK ON HAND IN GERMANY.

I am indebted to the courtesy of Professor ADOLF SOETBEER, of Göttingen, for the following statement:

I. GOLD COINS.

	Marks.	Pfenn.
Total Coinage, up to the end of 1871, in the States of the German Empire, of Gold Coins, which are of sufficient importance to be considered	539,276,416	29
Called in by the various Governments	7,692,125	21
Remaining	531,584,291	8
Called in by the Imperial Government since 1871	90,959,895	99
Evidence is lacking concerning	440,624,395	09

which in the course of time have been melted or exported by private persons.

Between 1871 and November 2, 1878, there have been coined of Imperial Gold Coins, 1,656,822,165 marks.

Of these greater or smaller amounts have been carried abroad whenever the state of exchange made it profitable, but in fact these amounts have returned to Germany. From the nature of the case it is impracticable to ascertain, with any certainty, how great the figure is by which the stock of Gold Coin in Germany has been diminished in this way. One would, however, not be making an estimate remote from the actual facts if one were to assume that this stock is, in no event, below 1,500,000,000 marks, and, indeed, in all probability it is greater, and could be put at 1,600,000,000.

II. SILVER COINS.

	Marks.	Pfenn.
Total Coinage of the States of the German Empire, up to the end of 1871, of the kinds of Silver Coin which are to be considered	1,940,425,911	97
Called in by the Governments of the different states, up to the end of 1871	141,721,742	52
Remaining	1,798,704,169	45
Total of old Silver Coins called in by the Imperial Government up to September 30, 1878	1,039,904,200	

Among the Silver Coins thus called in there are various sorts of Coins concerning the manufacture of which nothing has been definitely known. These amounted to about 12,317,000 marks.

While according to this calculation the amount of 781,117,000 marks of Silver Coins of the German States might be still on hand, it is at the same time beyond doubt that the actual stock must be decidedly smaller, seeing that in the course of time notable sums, even of these sorts of Coin, have been melted by private persons, or exported, or otherwise lost.

How highly this quota is to be estimated is a question upon which opinions have widely varied. Experience has justified those who have estimated this reduction of the stock at a lower figure than that at which the majority were disposed to fix it. Of the kinds of Coin which are here to be considered, leaving out the one-thaler pieces, the excess of those coined over those called in was shown to be 693,343,000 marks. Of these, 537,845,000 marks have been brought in; and according to this the reduction of the stock by other means amounted to 155,498,000 marks or about 22 per cent. It is true that in this last sum are included Coins which through neglect remained unredeemed, and which, after the term of redemption expired, came to be melted down by private persons; but this amount can hardly be estimated at more than three or four million marks.

In estimating the stock of Silver Coins of date previous to 1871 which are now (November, 1878) in circulation in Germany or in the vaults of the banks, and which it is intended to call in and to export, we have only to do with the one-thaler pieces.

	Marks.
The excess of the one-thaler pieces coined over those called in before 1871	1,099,810,347
Deducting for loss between 1750 and 1871	219,962,069
We have as an estimate for the stock at the end of 1871	879,848,278
Of these the Imperial Government has called in up to 30th September, 1878	489,753,426
Leaving as the stock on October 1	390,094,852

Of Imperial Silver Coins there have been coined up to November 2, 1878, 426,883,391 marks, and there will be no further demand of importance on this head, as the German Coinage Law prescribes as a *maximum*

10 marks per head of the population, and the latter according to the last census was, on December 1, 42,727,360.

The entire Coin circulation of Germany including the reserves of the banks can therefore be approximately stated as follows:

	Marks.
Gold Coins	1,550,000,000
Silver:	
One-thaler pieces	390,000,000
Austrian thalers	80,000,000
Imperial Silver Coins	427,000,000
Total	2,447,000,00

LATE ANTI-SILVER LEGISLATION IN EUROPEAN STATES.

GERMAN LEGISLATION AGAINST SILVER.

The act of December 4, 1871, by which the New Empire assumed the right of Coinage in its own name, ordained a Coinage of Gold Coins, decimal multiples (10 and 20) of a new unit called "Mark," and, in fixing the Legal Tender of these Gold Coins, provided that the Mark of Gold should be rated as equivalent to one-third of a Prussian Thaler, &c.

The relation of weight thus established between the Gold Mark and the Silver Mark was that of 15½ to 1.

Section 10 of the act provided that the Coinage of Gold Coins, other than those there provided for, and the Coinage of the larger Silver Coins, except Memorial Coins ("Victory Dollars"), should cease.

This was a repeal of the provision of the treaty of Vienna, of January 24, 1857, for the Coinage of Silver Dollars of the Union.

By this act Germany entered upon a transition state, the features of which were Legal-Tender Gold, in addition to Silver, at 15½ to 1, a new Coinage of Gold, no Coinage of Silver, and a stock of Coin on hand, exclusive of the Gold brought into Germany by the payment of the French war-fine, consisting of something like three parts of Silver to one of Gold.

The Coinage Act of 9th July, 1873, established the "Imperial Gold Standard" in the place of Local Standards, hitherto maintained in the different States which had, by their Union, formed the Empire.

The unit was to be the Gold Mark. Private individuals were granted the right to have 20-Mark pieces Coined, but this right must not interfere with the Coinage on Government account.

The maximum of mint charge was fixed at 7 Marks to the pound fine.

The act also provided for an Imperial Silver Coinage on Government account, the maximum amount of which to be issued was fixed at 10 Marks per head of the population, and the Legal Tender of which was limited to 20 Marks between individuals, while it was to be payable to the Government in any sum. The old Silver remained in the meantime Legal Tender.

The act provided that for all new Silver Coins issued an equal amount of old Silver Coin should be withdrawn.

Questions of weight and other details concerning the Coinage were remitted to the jurisdiction of the Federal Council, as well as the power of decrying or putting out of currency any Coins circulating in Germany; and the calling in or retiring from circulation of the existing Silver Coin was left to administrative regulation.

The resolutions of the Federal Council of July 8, 1873, fixed the weight of the fine Silver in the new Coinage at 11⅓ per cent. below full weight at 15½ to 1. (The French charge on tokens is 7.84; the English, 8.48 below.)

LIMITATION AND SUSPENSION OF SILVER COINAGE IN THE STATES OF THE LATIN UNION.

The Conference of the Latin Union adopted, on the 30th of January, 1874, a Treaty, subsequently ratified, supplementary to the Monetary Treaty of 1865, by which the High Contracting Parties agreed to coin for the year 1874 in 5-franc pieces, no more than 12 millions francs in Belgium, 60 millions in France, 40 millions in Italy, 8 millions in Switzerland; and the delivery of Coins upon Mint receipts of 31st December, 1873, to the amount of near 50 millions was applicable upon these quotas.

By a special article, Italy was allowed to coin for the reserve of her National Bank 20 additional millions in 5-franc pieces.

The Conference of the Latin Union of 1875 made, on February 5, 1875, a declaration, subsequently ratified by the respective Governments, which repeated in substance for 1875 the provisions of the additional Treaty of 1875.

The Conference of 1876, by a similar declaration, February 3, 1876, fixed the total maximum of 5-franc pieces to be coined for 1876 at 120 million francs, with a small additional contingent for Greece.

The Conference of 1877 suspended entirely the Coinage of 5-franc pieces, except that a contingent of 9 million francs was accorded to Italy.

In the mean time, however, by the law of December 18, 1873, continued to January 1, 1879, the Government of Belgium held the power to suspend the Coinage of Silver entirely; while a similar power had been conferred on the French Government by a law of ——— —, 1876.

A similar power is held by the Government of Switzerland.

The contingent allowed by the Treaty does not, therefore, indicate the actual Coinage.

The Monetary Treaty of 1865 provided that if notice of dissolution were not given before January 1, 1879, the Treaty should remain in force for fifteen years from January 1, 1880.

In presence of this contract, the Plenipotentiaries of France, Belgium, Greece, Italy, and Switzerland, in a Conference in Paris in the autumn of 1878, prepared a second Monetary Treaty for the continuation of this Union "in all that relates to fineness, weight, denomination, and currency of their Gold and Silver Coin."

The chief point in matter of novelty in the new Treaty is the suspension of the Coinage of Silver 5-franc pieces.

Article 9, guaranteeing to each State free coinage of Gold (excepting of Gold 5-franc pieces, of which also the Coinage is suspended) provides that "the Coinage of Silver 5-franc pieces is provisionally suspended. It may be resumed when a unanimous agreement to that effect shall be established between all the contracting States."

The Treaty is to be ratified within 8 months from November 5, 1878, and to be in force till January 1, 1886.

SUSPENSION OF SILVER COINAGE ON PRIVATE ACCOUNT IN HOLLAND.

The act of June 6, 1875, stating, in the preamble, that it was desirable to adopt some temporary measures in reference to the monetary system, provided for the Coinage of a 10-florin piece of Gold, and that it should be legal tender, (the Coinage to be free, except so far as it is subjected to the convenience of the state, and the Mint charge to be fixed by administrative regulation,) and suspended the right of private individuals to have Silver coined until January 1, 1877; at which date the act itself was to be revised. It was, in fact, then, continued in force.

THE SCANDINAVIAN UNION.

The Exhibits presented to the Conference by Dr. Broch (see pages 192, 193) set forth the nature of the system introduced upon the formation of the Scandinavian Union; but full details concerning the transaction have not, so far as I am informed, been given to the public.

A PARTIAL LIST OF MODERN PUBLICATIONS

ON

THE SUBJECT OF MONEY.

The following list is an enlargement of a similar one which formed itself under the writer's hand in the course of an examination into modern monetary controversy, and which was printed in 1876 as an appendix to a work on "Silver and Gold," offered as a printed deposition before the Congressional Monetary Commission which began its sessions in the autumn of that year. That list was based upon the bibliography of Money, printed by Dr. Soetbeer in his "Memorial concerning German Monetary Unification," in 1869, to which additions were made by him in an appendix to his "German Monetary System," 1874. As early as 1853, M. Michel Chevalier had appended to his important article on Money, in the Dictionary of Political Economy of Coquelin and Guillaumin, a selected list of authorities from which a few titles have here been borrowed. I should also mention the admirable catalogue of works in the Library of Congress on Political Economy, etc., prepared by its Librarian, Mr. A. R. Spofford, in which I have found a large number of titles.

I have the further pleasure of recording my obligation to Professor Soetbeer for the personal communication of several titles in addition to those before mentioned, and a like indebtedness to M. Eudore Pirmez, M. C. Feer-Herzog, to M. Henri Cernuschi, and to M. Esquirou de Parieu.

A PARTIAL LIST OF MODERN PUBLICATIONS ON THE SUBJECT OF MONEY.

An indispensable source of knowledge about Money is

First. That BODY OF LAW which in the different nations of the world defines and regulates the status of Money, property in Money, and Money debt, or obligations enforcible by delivery of Money.

Second. That BODY OF LAW which determines what commodity or commodities may remain or may become Money.

Third. That BODY OF LAW which prescribes the process by which such commodity may become Money.*

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*THE POSITION OF LAW IN THE DOCTRINE OF MONEY.

AN EXPLANATION.

To the contribution to the Study of Monetary Policy here presented it may prove useful to prefix some words explanatory of certain features of this voluminous list of books, which, from all but a few of the doctrinal writers named in it, would elicit expressions of unqualified dissent. I refer chiefly to the prominence which I have given to law, according to its different branches, as material for knowledge about Money.

This view of the relation of Money and law has not yet been promulgated, so to speak, *ex cathedra;* it has not yet found its way into Manuals of Political Economy through which the youth are taught, and the greater part of the monetary powers that be have not yet consciously framed their political action in obedience to its teachings.

This view is, in fact, excluded from credence by the doctrines which originally

While the expression "law" is applicable to each of these classes, yet, in its narrow sense, "Law" belongs especially to the first class, while the second and third may be comprised in the word "legislation."

Although existing in print, this material of knowledge must, for the most part, be gathered here and there in publications too numerous to be named, which are generally neither in title, nor according to common belief, germane to the subject of Money; namely, in the reports of decisions of courts, in juristic treatises, and in statutes, which are the source of the material first mentioned, while the latter are chiefly matter of statute, and sometimes of administrative regulation.

The important questions at issue which concern Money, being political in their nature and demanding the attention of the publicist rather than of the practicing lawyer, of course no approach to a systematic treatise upon Money or upon any department of Monetary Science is to be looked for in such works. It must further be observed that even in matters within the direct range of their purpose the classification of the contents of law books often leaves much to be desired. Hence, in suggesting the titles Money, Legal Tender, Debt, Loan, Interest, Negotiability, Fungibility, Specific Performance, Damages, Taxation, Fines, Penalties and Forfeitures, Coins, Coinage, Mint, &c., as being titles in the index and table of contents of legal works which bear upon the subject, I can do so only with the reservation that neither in the books themselves, excepting books of statutes, nor in the phraseology of references

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supplied motive for the most striking monetary movement of modern times'; the still unabandoned persecution of Silver by the civilized nations.

Gold and Silver, say the leaders of this movement, *are commodities and they are nothing else. Like iron, like wheat, they belong to commerce, not to legislation. The stamp of the Mint upon the disc of metal is a mere certificate of its weight and fineness. The great law of supply and demand which regulates the movements and the value of the precious metals pays no heed to the arbitrary commands of Legislatures and of Courts.*

The learned reader will recognize these as admitted household truths of the magistral economic science of the day.

The acute reader will observe that with proper interpretation, these postulates are capable of establishing in the field of practical policy that Monometallism can do no harm, and that Bi-Metallism can do no good, and that the choice of a Money Unit is strictly analagous to the choice of a unit of weight or of measure. (If proof were needed here, I could most conveniently refer to the expressions of some of the acute and learned European Delegates at the Conference in earlier pages of this volume.) The field is thus, of course, left clear that Gold, the lighter, the nobler metal, may draw mankind onward in the path of simplicity, unity, brotherhood, by becoming, as universal and sole Money, the brightest jewel of that crowning glory of the world's future progress, a Metric System embracing the entire globe.

And in favor of these Postulates, and of the conclusions they justified, and of the hopes they inspired, it has long been possible to cite the practice of England, the policy of Germany, and the aspirations of France.

On the other hand, the late monetary action of the Government of the United States,

to their contents will the reader find a presentation of the subject constructed with special reference to Money, nor in fact aught but the raw material of knowledge.

IN GENERAL ALL WORKS ON NATIONAL ECONOMY, POLITICAL OR SOCIAL SCIENCE, CONTAIN ESSAYS UPON MONEY.

The same may be said of CYCLOPÆDIC WORKS, while in general HISTORICAL WORKS present facts of importance in Monetary History.

In general may also be cited works which supply material for estimating the AMOUNT AND NATURE OF EXCHANGES made in the different nations or between one and another, whether by transfer of Money or by adjustment on paper; works explanatory of the Banking and Clearing-House Systems of the different nations; works treating of the development of Commerce and Industry, the increase of Exchanges, &c.; customs returns of the different nations which indicate the quantities of merchandise exported and imported and the valuations set upon them by the various parties interested; and works of commercial and industrial statistics and notably upon PRICES; while among Periodical Publications, Annuals, Reviews, Magazines, Weekly and Daily Journals, especially, of course, those devoted to economic subjects, are to be found important facts, and also many essays of interest, notably as illustrating the progress of Monetary controversy.

Concerning the Precious Metals may be cited: In general, works on

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not in coining the new Silver dollar, be it understood, but in limiting the coinage and in calling the Monetary Conference of 1878, while it was the announcement of a policy of practical opposition to that which prevails in Europe, was also in the field of science, if rightly understood, a Declaration of Independence from the scientific errors of the anti-silver theories.

By the law of February 28, 1878, the United States became a teacher of reformed monetary doctrine.

The United States proposed to Europe concurrent coinage of Silver and Gold at one ratio, with a view to their concurrent use in the countries of the proposed Union, and to the comparative steadiness of their relation to each other everywhere; and to do this was equivalent to an assertion by the United States, with that far-resounding utterance of which none but a great nation is master, that human law is a factor in the movement, and of the value, of the precious metals.

It is impossible to exaggerate the importance of the international questions to which the world's attention has thus been directed. The material interests of mankind are still hanging upon the issue of this controversy of the nations upon a question of fact. All science agrees that steadiness in value is the test of good Money, and every one knows that confidence is the "life of business." If national laws be an important factor of demand or of supply of the metals, and hence a factor of their value, the monetary structure of the world, the entire economic organism in many countries, has been and must remain at the mercy of ill-advised legislation even in the few; while in the practical problem now at issue, it must be recognized that the persecution of Silver being an attack against the steadiness of purchasing power of the world's Money, both

the Art of Coinage and organization of Mints; those parts of works of Chemistry and Physics which explain the nature of the Precious Metals; of works on Mining and Metallurgy, which explain the mode of their extraction and preparation for use; of works on Geography, Geology, Travels, &c., which tell of their presence in various parts of the earth's crust; of works of Industrial Statistics, which explain their use in the Arts; and works on Numismatics, to the extent to which they afford material for Monetary history.

OFFICIAL PUBLICATIONS CONCERNING MONEY.

AUSTRIA-HUNGARY.

VERHANDLUNGEN der Special-Commission für Berathung der Münzfrage vom 10. bis 14. April 1867. Unter dem Vorsitze des Freihern von Hock. Wien, 1867.

BELGIUM.

DOCUMENTS relatifs à la question monétaire, la Convention de 1865, exposé des motifs de la loi actuelle, rapports sur cette loi, texte des lois antérieures, etc., etc. 1 vol. 4 to. Bruxelles, 1866.

COMPTE-RENDU des discussions de la Commission réunie par M. J. Malou, Ministre des Finances, à Bruxelles, Oct.-Nov. 1873, pour examiner avec lui les diverses questions monétaires. Bruxelles, 1874.

DOCUMENTS relatifs à la question monétaire, recueillis et publiés par M. J. Malou, ministre des finances. Première série, 1874.—Deuxième série, 1876.

BRITISH-INDIAN EMPIRE.

REPORT from the select committee appointed to inquire into the cause of the high price of gold bullion, the state of the circulating medium, etc. 1810. fol. London, 1810. (See extracts page 364.)

Silver and Gold; a disturbance of the world's valuations; a paralyzing blow at the world's production and exchange; from which mankind may still suffer for years to come as it has in the past, the remedy for a great part of the general evils under which the business world now suffers is to be found alone in concurrent monetary legislation, either in a new balance of power or in International Union; if this be the teaching of scientific truth, and if the hitherto recognized interpreters of science have failed to enforce it, it is plain that "science" is in crying need of renovation. In any event the question has been raised, and the brain and heart of the thinker should be called into fullest activity, that the contest be at least decided as soon as possible.

If, therefore, an aggressive statement on my part can contribute to provoke from an opponent a successful refutation of these views, I shall still, though shown to be in error, have humbly served the cause of truth, and I shall rejoice if this list of materials of knowledge shall have afforded to my farther-seeing adversary any additional means of accomplishing this end.

In my own ascertainment of the necessity of a reformation of monetary science, (so at least I regarded it) by according to private law, and to statute, a position in the doctrine of Money analogous to the place which I have above assigned to it, in a list of books, an analysis of what the best minds had been able to advance as the argument for the Gold Standard long ago led me to seek to formulate for myself, ("Silver

REPORTS from the committee of secresy appointed to consider the state of the bank of England, with reference to the expediency of the resumption of cash payments. 1819. fol. London 1819.

REPORTS from the committee on the bank of England, and on the necessity of the continuance of [suspension of cash payments]. fol. London, 1826.

REPORT from the secret committee on the expediency of renewing the charter of the Bank of England, and the system on which banks of issue in England are conducted. 1831. fol. London, 1832.

RETURN: East India—Gold Currency, Feb. 25, 1835.

RETURN: Production of Gold and Silver Mines. Parl. Paper No. 338. 1832.

Same title. Parl. Paper No. 476. 1843.

REPORT from the select committee on decimal coinage; together with the proceedings of the committee, minutes of evidence, appendix, and index. London, 1853.

FURTHER PAPERS relative to the discovery of Gold in Australia, in continuation of papers presented 16th Aug. 1853. London, Feb. 1854.

QUESTIONS communicated by Lord Overstone to the Decimal Coinage Commissioners, with answers. London 1857.

REPORT from The Select Committee of Bank Acts, together with the proceedings of the Committee, Minutes of Evidence, Appendix and Index. Part I, report and evidence. 1857.

REPORT from the Royal Commission on international coinage (Viscount Halifax, C. P. Villiers, S. Cave, J. Wilson Patten, Mountifort Longfield, Sir J. Lubbock, T. Baring, Baron L. N. de Rothschild, J. B. Smith, T. Hankey, T. N. Hunt, G. B. Airy, T. Graham, C. Rivers Wilson, sec.), together with the evidence and Appendix—(containing minutes of the Proceedings of the International Monetary Conference of 1867, and various Reports upon the same, Returns relative to Gold Coinage and Mint regulations of Foreign countries, the Coinage Laws of the United States, memoranda concerning the Monetary Treaty of 1865, opinions of Political Economists on the subject of Seigniorage, etc., etc.) London, 1868.

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and Gold," Cincinnati, 1876) with some precision, the logical foundation of their doctrine. It was thus that I was led to discover, as I believed, the remote origin of this theory as to demand and supply of, or causation of, the value of the precious metals. This theory of the partisan of Gold and persecutor of Silver, seemed to me to connect itself directly with a most ancient root of opinion, whose familiar fruitfulness in fallacy well accounted for the peculiar vigor of this redoubtable offshoot.

I refer "to the Law of Nature, or Natural Law."

Time forbids my attempting to sketch the history of this theory; suffice it that the thoughtful student, whether of morals or of religion, of politics or of law, will recognize it as a time-honored and ever-fertile mother of the false as well as of the true.

What share of fact is there then, I asked, in the underlying substratum and foundation of this theory of the partisans of Gold and persecutors of Silver, in this assumed antithesis, this supposed mutual exclusiveness of jurisdiction between *edict, decree, legislation, law, the arbitrary and official command of the state,* on the one side, and *nature, natural laws, the needs of commerce, the wants of trade, the natural course of events,* so far as Money is concerned?

Contrast there is, of course, and ever will be.

But to what extent are the Precious Metals, and Coin made of them, subjected to the influence of these great forces, respectively? What is this "natural" state of affairs to which points this theory of the partisan of Gold, of the persecutor of Silver?

Obedient to this hint I followed Money to its *state of nature,* to *an imagined origin* of

REPORT of the international conference on weights, measures and coins, held in Paris, June 1867; communicated to lord Stanley by professor Leone Levi; and Report of the master of the Mint and Mr. Rivers Wilson on the international monetary conference held in Paris, June, 1867. London, March 1868.

EAST INDIA CURRENCY. Copy of the report of the Commission appointed by the Government of India to consider the question of the currency. 16 March 1868. Parl. pap.

PRELIMINARY REPORT of the decimal coinage commissioners. London, 1857.

FINAL REPORT of the decimal coinage commissioners. London, 1859.

REPORT of the Currency Commission. Calcutta, 1867.

REPORT. Banks of Issue. London, 22d July, 1875.

REPORT of the Committee of the House of Commons upon the Depreciation of Silver [Göschen, Baxter, C. B. Denison, Kirkman Hodgson, Hubbard, Lord G. Hamilton, Massey, Mulholland, Fawcett, Cave, Shaw, Hermon, Sir C. Mills], together with the proceedings of the Committee, Minutes of Evidence, and Appendix. London, 1876.

RETURN, East India (Silver). 22d March, 1877.

RETURN, East India (Silver). 11th August, 1877.

REPORT, Gold and Silver (Hall Marking). London, July 31st, 1878.

FRANCE.

PREMIER Rapport du Comité des Monnoies à l'Assemblée Nationale. Paris, Imp. de la Rép. 1790. (*Reprinted in English, see page* 268.)

SECOND Rapport et ibidem.

MIRABEAU. Observations préliminaires sur le Rapport du Comité des Monnoies, et Mémoire sur la Constitution Monétaire. Paris, Imp. de la Répub., 1790. (*See extracts, page* 297.)

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civil society. Civil society, I saw, implied the growing recognition of obligations, and an inchoate but progressive enforcement of them. These obligations implied constraint of the free will of the individual by the free will of the community, or of its appointed ruler; and hence, as compared with previous conditions of its constituent parts, society itself meant something artificial, arbitrary, official; and the contrast could only be, in important respects, heightened as time went on, for while the individual was born and died, society did not suffer death, and its corporate existence, through its perpetuation, gathered accumulation of authority.

What was the position of Money in this change? Was it not, I asked, a constituent factor in the evolution of society?

These obligations of which I have spoken, this differentiation of functions involved a division of labor, and compensations must be made by one part of society to another, and notably to the governor by the governed.

And what is this but saying that tribute and taxes are therefore indispensable to civil society?

Again, without sanction of some sort, the obligations of law are ineffective. Of what avail this moral growth, this recognition and creation of obligations, this sense of the right to enforce them, if there be no means of enforcement, no power to compel to submission the individual who is insubordinate to the collective will? Hence the command of obedience to the law must be supplemented by adequate means, either of prevention or of punishment. In fine, a Penalty must be imposed for transgression. In many cases this penalty, being proportioned to the offense, must be, not loss of life nor mutilation of limb, not loss of liberty nor of privilege, but a simple

PRIEUR. Rapport sur la loi des monnaies fait au nom de la Commission des finances au Conseil des Cinq-Cents. Paris, An VI.

GAUDIN. Premier Rapport du Ministre des Finances aux Conseils sur les Monnaies. Paris, Imp. de la Répub., An XI.

BÉRENGER. Premier Rapport sur les monnaies.—Section des Finances.—Citoyen Bérenger rapporteur. Paris, Imp. de la Répub., An X.

BÉRENGER. Second Rapport sur les monnaies.—Section des Finances.—Citoyen Bérenger rapporteur. Paris, An X. (*See extracts, page* 723.)

GAUDIN. Second Rapport du Ministre des Finances aux Conseils de la République sur les monnaies. Paris, Imp. de la Répub., An XI. (*See extracts, page* —.)

RAPPORT au Roi sur l'administration des finances, par le Comte de Chabrol, Mar. 15, 1830. (Partie intitulée *Commission des Monnaies.*)

DUMAS ET COLMONT. Rapports à M. le Ministre des Finances, 1838–1840.

MINISTÈRE DES FINANCES. Rapport de la Commission chargée d'étudier la question monétaire. Févr. 22, 1858. Documents relatifs à la question monétaire. 4°. Paris, Impr. imp., 1858.

MINISTÈRE DES FINANCES ET MINISTÈRE DE L'AGRICULTURE, DU COMMERCE ET DES TRAVAUX PUBLICS.—Enquête sur les principes et les faits généraux qui régissent la circulation monétaire et fiduciaire. Dépositions écrites, françaises et étrangères. 6 vol., 4°. Paris, Impr. imp., 1867–187–.

RAPPORT à S. E. M. le Ministre des Finances, au nom de la commission chargée d'examiner la question des monnaies divisionnaire d'argent. [Schneider, Pres't, De Parieu, Dumas, Michel Chevalier, Vuitry, Guoin, Pelouze, De Sénarmont, De Bosredon, De Bonnechose.] Paris, Impr. imp., 1862.)

MINISTÈRE DES FINANCES. Rapport de la commission chargée d'étudier la question de l'étalon monétaire. Paris, 1867.

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transfer of property to the injured party or to the State. So again in matters not criminal in their nature, when specific performance of obligation, refused by the recalcitrant party, cannot be conveniently enforced by the State, the injured party must be made whole by a transfer to him of the property of the other.

It is obvious then that if the origin of society implies an attempt at the administration of justice, it also implies fines and damages.

And what is the substance, the material of tribute and fine, of taxes and damages? Evidently, whatever it is, it must be Money.

The power which demands them must say in what commodity the command can be lawfully satisfied, and whatever use there may be of payment "in kind," yet the Institution of Money is in existence. Cattle or shells, salt or silver, something has become for the occasion *Lawful* Money and *Legal* Tender.

Commerce, be it not forgotten, has been contemporaneously present in the evolution of society, and commerce has created a *medium of exchange* out of something generally acceptable as an *equivalent*. The individual has obeyed his needs, and he, as well as society, has made use of a Money. Nay, the individual and the State, the convenience of both conspiring to that end, have used the same commodity as Money. The merchandise which serves as income and expenditure of the State, and the enforced transfer of which gives law its sanction, has also supplied to the individual that "third thing to be compared with others," that "measure" which, in facilitating exchange and the division of labor, furthers civilization.

The Money of commerce, therefore, and the Money of the State are materially one;

EXPOSITION UNIVERSELLE DE 1867. Comité des poids et mesures et des monnaies. Rapport concernant l'uniformité des poids. Paris, Juillet 1867.

MINISTÈRE DES FINANCES.—Documents relatifs à la question monétaire. Paris, 1868. 4°.

PROCÈS-VERBAUX et rapport de la commission monétaire de 1867, relatifs à la question de l'étalon. 2 vols. 4°. Paris, Impr. imp.,1868.

PROCÈS-VERBAUX et rapport de la commission monétaire de 1868, suivis d'annexes relatives à la question monétaire. 2 vols. 4°. Paris, 1869.

CONSEIL SUPÉRIEUR DU COMMERCE, DE L'AGRICULTURE ET DE L'INDUSTRIE.—Enquête sur la question monétaire. 2 vols, 4°. Procès-verbaux des délibérations du Conseil supérieur. Rapports. Dépositions. Paris, Impr. nationale, 1872.

SÉNAT. (Session 1877–1878.) Procès-verbaux des séances de la commission d'enquête sur les souffrances du commerce et de l'industrie et sur les moyens d'y porter remède. 1 vol. 4°. Impr. du Sénat, Versailles, 1878.

GERMAN EMPIRE.

UEBERSICHTEN über die in den Staaten des Norddeutschen Bundes stattgehabten Ausprægungen und Einziehungen von Gold-, Silber- und Kupfer-Münzen. No. 8 der Actenstücke des Bundesraths, Session 1869, Berlin. Fol.

MOTIVEN des Gesetzes vom 9. Juli 1873. Mit Zusaetzen. Berlin, 1873.

UEBERSICHTEN über die in den Staaten des deutschen Reichs bis Ende 1871 stattgehabten Ausprägungen und Einziehungen von Münzen. (Actenstücke zu den Verhandlungen des deutschen Reichstags, Sess. 1873.)

I.—VI. DENKSCHRIFTEN über die Ausführung der Münzgesetzgebung. (Vom Reichskanzler dem Reichstage mitgetheilt und abgedruckt in den Actenstücken zu den Verhandlungen des Reichstags, 1873 bis 1878.)

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but the origin of this unique product is two-fold. It is referable to distinct though correlated causes. In demand for a Money the total free will of man has, so to speak, divided itself into two channels of volition. The necessities of government, in which is incorporated a part of the free will of man, conspires with the needs of the individual who makes exchanges with his fellows, in the creation and in the maintenance by all the force of private law of the Institution of Money.

So, in later stages of development, the existence of a form of capital which can be most easily transported in space and preserved in time finds its support in that activity of the law to which interest, fungibility, negotiability, are to be referred. In the lore of possession and of property, that debatable ground both of practice and of legal doctrine, Money acquires a standing entirely different from that of ordinary movable commodities, and a loan of Money becomes different in the eye of the law from the loan of other commodities, while the right of drawing interest as now recognized is the product of a slow evolution of legal right.

Such, then, seemed to me, in brief, the nature of the Institution of Money. It is this phase of Coin which is neglected in the postulate first mentioned.

Now, this Institution of Money evidently necessitates in each nation the selection of some particular commodity to be used as Money by its members, and the initiative and control of this selection is in the centralized power of the State.

We see here the power of legislation in the narrower sense of the word.

In every nation, arising from the mere fact of its organized existence, there is an universal and persistent need to employ something not merely as a medium of exchange, but as the Legal Instrument of Valuation and Legal Means of Payment, as

HOLLAND.

A. VROLIK. [Report to the Ministry of Finance on the Coinage.]
RAPPORT der Staats commissie over de Muntquestie, 1872.

ITALY.

MINGHETTI E FINALI. Relazione della circolazione cartacea. Esposizione storica delle vicende e degli effetti del corso forzoso in Italia, con documenti a corredo, etc. 4to. Rome, 1875.
NOTIZIE intorno all' Ordinamento Bancario ed al Corso Forzato negli Stati Uniti di America, in Russia, nell' Impero Austro-Ungarico e in Francia. 1876.

SWEDEN AND NORWAY.

WALLENBERG. [Report to the Swedish Government on the Conference of 1867. Stockholm, 1867.]
O. J. BROCH. [Report to the Norwegian Government on the Conference of 1867. Christiania, 1867.]
RAPPORT de la Commission chargée d'étudier la question monétaire. Stockholm, 1871.

SWITZERLAND.

MESSAGE du Conseil Fédéral à l'Assemblée fédérale touchant les Monnaies. Du 30 décembre 1859. (C. Feer-Herzog.)
BERICHT der Mehrheit der national räthlichen Münz-Kommission . . . . in Betreff auf die Münzfrage, 1859.
RAPPORT au Conseil Fédéral Suisse sur la Conférence Monétaire de Jan. 1874, par Feer-Herzog et Lardy. Berne, 1874.

Lawful Money and Legal-Tender. It is legislation which directs this universal and persistent force upon this or upon that commodity, and in marshaling the force of human self-interest upon its side it provides effective means for the execution of its edicts. It thus affects the demand for the commodity selected, and if this be so, the second and fourth Postulates of the partisan of Gold are shown to be erroneous. In modern days this initiative and control is peculiarly the province of the State. Centralization has grasped the reins of Money. The great modern movements in extension of what we call the "credit system" are an indefinite expansion of these very obligations over which, by fixing means of their fulfillment, the legislature and the court inevitably hold jurisdiction.

But it may be supposed—and great minds have naïvely sanctioned this error—that there is no range of choice for the legislator in the selection of Money; that he is powerless in the hands of commerce: so that his functions are merely ministerial, and his efficient influence *nil*.

Let us examine, in this connection, the third Postulate, "*The stamp of the mint is merely an official certificate of weight and fineness.*"

Is this true? Is not the stamp of the mint far more?

By that stamp, bullion, which before was only potential Money, a part of the physical basis of the world's great Institution of Money, has become actual Money in the State which coins it. Through that stamp, the piece of metal has become a means of payment, at schedule rates, of all obligations enforcible within the borders of that State. Through that stamp the commodity, bullion, has become the commodity, Money.

Now, in itself this formula, this "official certificate of weight and fineness," does

RAPPORT . . . . sur la Conférence de Jan.-Fév. 1875, par Kern et Feer-Herzog.

RAPPORT . . . . sur la Conférence de Janv-Fév. 1876, par Kern et Feer-Herzog.

LA CONFÉRENCE Monetaire Américaine. Rapport au Conseil Fédéral Suisse par MM. Feer-Herzog et Lardy. Berne, 1878. (*See extracts, page* —.)

UNITED STATES.

THOMAS JEFFERSON. Notes on the establishment of a Money Unit and of a Coinage for the United States, 1874. (*Reprinted. See page* 437.)

ALBERT GALLATIN (Secretary of the Treasury). Letter to a committee of the House of Representatives on the Valuation of Foreign Coin. Dec. 17, 1810. American State Papers, Finance, II, 457.

ALEXANDER HAMILTON. Report (as Secretary of the Treasury) on the Mint. Washington, 1792. (*Reprinted. See page* 454.)

W. H. CRAWFORD. Report (as Secretary of the Treasury) on the circulation. Washington, 1820. (*Reprinted. See page* 502.)

REPORT of the committee of the House of Representatives on Currency, Feb. 21, 1821, on the expediency of increasing the relative value of the Gold hereafter to be coined at the Mint of the United States. 2d Sess., 16th Cong., H. R. 54. (*Reprinted, see page* 554.)

S. D. INGHAM. Report (as Secretary of the Treasury) on the relative value of Gold and Silver, &c. Washington, 1830. (*Reprinted. See page* 558.)

REPORT, Dec. 15, 1830, from the Select Committee of the Senate on the state of the Current Coins, by Mr. Sanford. 21st Cong., 2d Sess., S. R. 3.

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not explain the nature of the commodity bullion. It does not explain the nature of the commodity Money. Nor does it indicate the reasons why this stamp works the transition from one to the other.

Evidently, then, this "official certificate of weight and fineness," to which most economists try to limit the activity of the legislator, is essential in the doctrine of Money, just as in war the clothing, the uniform of the soldier, the title of the officer are really matters of first importance.

An army naked and without organization is evidently as little to be thought of as Money without mints.

But, at the same time, to dignify this matter of the "stamp of the mint and official certificate" to the position of being an exhaustive formula of monetary science, is it not as if we should gravely assert in ponderous volumes that campaigns are matters of epaulets, and that the fate of nations depends upon gold braid and striped pantaloons?

On the other hand, if this dictum, instead of being presented as an exhaustive formula of science, assume the more modest role of a simple rule of the art of Money, a maxim of Monetary Policy, it entirely justifies itself. If we say merely "the stamp of the mint *ought to be* an official certificate of weight and fineness," which is as if one should say, "that which is called a dollar *ought to be* worth a dollar" in the market, we find ourselves in possession of a sound and solid guide to action.

It is as if one should say, in speaking of the art of war, "armies should be clothed, in uniform, and be commanded by officers of varied grades of command."

What can be more true and yet more innocent of scientific importance?

But if the interpreters of Science have rejected the maxim of policy, and cling to the

REPORT of the Select Committee of the House of Representatives on Coins, etc., C. P. WHITE, chairman, Feb. 19, 1834, 23d Cong., 1st Sess., H. R. No. 278, 116 pp.; containing also a Reprint of the Report of March 17, 1832, on the State of the Coins, by Mr. WHITE, chairman for the similar committee, and of a Report of Feb. 22, 1831, upon the proposed Legal Tender of Dollars of the New American Governments and of five-franc pieces, by Mr. White, chairman of a select committee, &c. (*See extracts, page* 673.)

SAMUEL MOORE. Report on the Relative Value of Gold and Silver Bullion, etc., in a letter of the Director of the Mint, Jan. 11, 1833. (*See extracts, page* 678.)

S. RUGGLES. Report to the Department of State concerning the International Monetary Conference of 1867. Washington, 1869.

REPORT of the Commissioner of the General Land Office of the United States, dated October 15, 1867. Published by order of Congress. Washington, 1868.

J. ROSS BROWN. Report on the mineral resources of the States and Territories west of the Rocky Mountains. Communicated to Congress March 5, 1868. Washington, 1868. pp. 674.

J. W. TAYLOR. Report to the Treasury Department on the mineral resources of the United States east of the Rocky Mountains, May 2, 1868. Washington, 1868.

MAJORITY REPORT on International Coinage, Senate Finance Committee, Mr. Sherman, 1868.

MINORITY REPORT on International Coinage, Senate Finance Committee, Mr. Morgan, 1868.

MEMORANDUM. Metrical system of international coinage. Washington, Treasury Department, April, 1869.

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formula of science, it is evident that we are more advanced in the art of war than in the doctrine of Money, the great art of peace.

In this connection I may mention another dictum which rejoices in the undiscriminating support of some distinguished men. "*It is impossible to establish an unalterable ratio between the two metals.*" A dispassionate consideration will, I think, show that this dictum is likewise true to a slight extent, and untrue to a very great extent. And this modicum of truth, like the skin of the Dead Sea Apple, is on the outside, and, intercepting the glance, deceives the unwary eye. Does not this dictum stand, in fact, upon the same level with the doctrine "*it is impossible for a man to draw a line absolutely straight*"; or is it not, in truth, parallel with the denial of the possibility that the world can show two things which are exactly alike?

Undoubtedly if the civilized nations were to join in coinage of both metals at one ratio, a small proportion of the total of exchanges of the metals might still be made at a different ratio. Human free will is not likely to abdicate its privileges in favor of a Coinage Treaty. Of course a single exchange made anywhere in the world, at a ratio above or below that fixed by the supposed Treaty of Christendom, would make the desired break in the uniformity. When the strain is from one end to the other, the strength of a chain is that of its weakest link. Of course no matter where the break is in the line, if there be a break the line is not absolutely straight. If two objects be in ever so slight degree dissimilar their identity disappears. So it is true that it is impossible to establish in permanence and universally a fixed ratio between the metals, as it is true that no one can draw a line absolutely straight or show two things that are exactly alike.

But at the same time this so-called impossibility of a fixed ratio between the two

PROCEEDINGS of the International Monetary Conference of 1867, etc. (Ex. Doc. No. 14, 40th Congress, Second Session.) Washington, 1868.

WILLIAM P. BLAKE. Report upon the Precious Metals. (In report of the United States Commissioners to the Paris Universal Exposition, 1867). Washington, 1869.

REPORT of the Monetary Commission. [John P. Jones, Bogy, Boutwell, of the Senate; Willard, Bland, Gibson, of the House; Prof. Francis Bowen and Hon. W. S. Groesbeck. Geo. M. Weston, secretary.] Constituted in pursuance of act of Congress, August 14, 1876. Vol. I, Washington, 1877; Vol. II, 1879.

INTERNATIONAL CONFERENCES.

1867.

MINISTÈRE DES AFFAIRES ÉTRANGÈRES. [FRANCE.] Conférence monétaire internationale. Procès-verbaux. [Marquis de Moustier et Prince Napoleon Pres'ts, De Parieu Vice-Pres't, B^on^. Von Hock, B^on^. Von Schweizer, Von Herrmann, Von Haindl, Fortamps, Graf von Moltke-Hvitfeldt, Ruggles, De Lavenay, Herbet, Dutilleul, T. Graham, Rivers Wilson, Delyannis, Chev. Artom, Giordano, Vrolik, Mees, Comte D'Avila, Viconte De Villa-Maior, Meinecke, Herzog, Von Jacobi, Wallenberg, Broch, Kern, Djemil-Pacha, B^on^ von Soden, Clavery, Roux, Feer-Herzog.] Paris, Impr. imp., 1867.

E. DE PARIEU. Rapport de la conférence internationale de 1867. Paris, Impr. imp., 1867.

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metals is as unworthy to support a statesman in denying the possibility or desirability of a successful establishment of a fixed ratio, as the impossibility of making anything straight, or of making two things alike, is unworthy to prevent the construction of machinery and works of engineering. Machinery and engineering works all demand, for their perfection, straight lines and identity between different parts. At the same time substantial straightness, substantial identity, will suffice. In practice the infinitely small can be neglected by the engineer and mechanician; why not by the statesman, why not by the economist?

Returning now to our question we ask, what are the facts in this matter of the Legislator's choice of Material of Money. Leaving Copper out of account, to-day there are various weights of Gold and various weights of Silver. Cannot the Legislator fix the weight of coin as he will?

Again, there are the two metals taken together under a variety of conditions, and they can be taken at any one of a variety of ratios to each other.

And the protean forms of credit, Metallic Tokens and Paper Money, are also constantly at hand.

The history of our century is full of legislative acts of selection of these kinds.

A consideration of facts comparatively familiar will plainly show that if in one nation the Monetary Legislator has avoided the Scylla of Paper Money, and with a single metal sails past the Charybdis of a ratio, yet he is still at sea; he must either select afresh, or he must maintain, some fixed weight of that single metal as the legitimate successor of that National Unit of Valuation which the past has transmitted to his care. And that Unit of Valuation must be saved from the shipwreck of great fluctuation in its Purchasing Power. If the single metal fail to support that unit steadily, the Legislator must be ready to change his course, and to hoist what sail of

1878.

MINISTÈRE DES AFFAIRES ÉTRANGÈRES. [FRANCE.] Conférence Monétaire Internationale de 1878. [Baralis, Broch, Delyanni, Feer-Herzog, Fenton, Garnier, Göschen, Gibbs, Gurdon, Groesbeck, Von Hengelmüller, Horton, Jägerschmidt, Graf Von Küfstein, Mees, Pirmez, Conte Rusconi, Ressmann, Léon Say, Sir T. L. Seccombe, De Thoerner, Vrolik, Waern, Walker.] Paris, Impr. Nationale, 1878.

CONFERENCES OF THE LATIN MONETARY UNION.

MINISTÈRE DES AFFAIRES ÉTRANGÈRES. [FRANCE.] Conférence monétaire entre la Belgique, la France, l'Italie et la Suisse, 1874. Procès-verbaux. 3 vols. 4°. Paris, Imprimerie nationale, 1874.

[The same,] 1875.

[The same,] 1876.

[The same,] 1878.

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law is needed (whether it be an Act of Suspension of Cash Payments, or of the "Bank Act," or a new Act of Coinage or of Legal Tender), if only he can keep free of the breakers. It must also be clearly remembered that for the Monetary Legislator there is no port of refuge absolutely safe. Money is only by courtesy a part of a Metric System; it is folly to forget, as the monetary metrologist is constantly doing, that there is no real "standard of value"; the safest of all safe footing for the Monetary Legislator is at best but an Instrument of Valuation that contracts and expands under the action of demand and supply, and it is as true of the Monetary Legislator as of the mariner that constant vigilance is the price of safety. And the safety of the Money interests of commerce lies in keeping Money under the constant protection of wise laws.

Such, then, are, in brief, the grounds upon which I have felt it necessary in presenting a list of modern publications concerning Money, to warn the student against error by vindicating to the Jurist and to the Statesman a jurisdiction in the doctrine of Money, by the side of that of the professed Economist.

It remains, however, to anticipate a reply which will naturally occur to one who has pinned his faith upon the Postulates which I seek to refute. I desire to say clearly, therefore, that the position here ascribed to Law in the learning of Money in no sense demands the exclusion of a single one of the other elements of this learning which I seek to set forth in this list. The entire tide of human action, the entire material of which political and economic science treat, have, of course, been elements of the conflict of forces of which the monetary status at any given time is the outcome. The position of law is merely that of the seeing eye, the guiding hand, the will directly, specially, to the maintenance of Money.

Law alone has acted with constant and effective force in one general direction to this end.

Amid a wilderness of conditions the law has been a cause.

In a state of quiescence one may remain ignorant of the persistent force of monetary law; just as one can remain unconscious of the force of gravitation. But the force is there, and the maxim, ignorance of the law excuses no one, is also in force in both cases. The innocence with which one may slip from a precipice or stand in the way of an avalanche is no preservative against death from such attempts to ignore the

TREATISES.

PELETIAH WEBSTER. Nature and operation of Money, with essays on finance, etc. 8°. Philadelphia, 1791.

D. MAGENS. Inquiry into the real difference between actual Money, consisting of gold and silver, and paper Money. Also, examinations into the constitutions of banks. 8°. London, 1804.

CHARLES JENKINSON. A treatise on the coins of the realm by Charles, Earl of Liverpool. 1 vol. 4°. Oxford, 1805.

H. THORNTON. Inquiry into the nature and effects of the paper credit of Great Britain. 8°. London, 1807.

CH. MURHARD. Ueber Geld-Münze. Cassel und Marburg, 1809.

J. C. L. SIMONDE DE SISMONDI. Du papier-monnaie dans les Etats Autrichiens, et des moyens de le supprimer. 8°. Weimar, 1810.

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force of gravitation. And, like gravitation, the power of law can be effective although its activity be not apparent. It can be active by what, from a partial point of view, would seem merely passive, negative, mere acts of omission.

It is strange to what an extent some thinkers have been blinded to this truth; as if a Statute any more than a granite bowlder could lose its weight by lying still!

An illustration close at hand will perhaps clear up this contrast between conditions and a cause. A quarter of a century ago when Australian and Californian Gold, added to the outflow of Siberia, threatened to bear down to permanent depreciation the entire stock of the World's Money, France and England were called upon by certain thinkers to demonetize Gold. It could have been done. English and French statutes had as much power to outlaw Gold in England and in France, as had the statutes of Holland and the statutes of Belgium to exclude it from Legal Tender in those States. Parliament and Emperor could have passed the Statutes, had they desired it. They refused to do it. The older Statutes remained in force. They maintained Gold in its Monetary privileges, and they *saved Gold.* But for statutes, to be read in the books which I have cited, Gold would have been where Silver is to-day.

And yet, as I have said, merely because the statutes had been in force for a long

ESSAY on the theory of money and exchange. 8°. London, 1811.

ALEXANDER VON HUMBOLDT. Essai politique sur la Nouvelle Espagne. Paris, 1811. (English translation, New York, 1811.)

D. RICARDO. The high price of bullion a proof of the depreciation of bank notes. 8°. London, 1810.

CHALMERS (GEO.) Considerations on Commerce, Bullion and Coin. Lond., 1811.

JOHN T. KOSLIN. Short Statement of the Trade in Gold Bullion, etc., etc. Liverpool, 1811.

I. P. SMITH. Elements of the Science of Money, founded on the principles of the laws of nature. . 8°. London, 1813.

J. WITHERSPOON. Essay on Money as a Medium of Commerce. 12°. Edinburgh, 1815.

ZACH-GALLARD. De la conservation du numéraire en France. Paris, Avril, 1816.

MARTINEAU. Du numéraire et des moyens de remplace celui qui sortira de la France. Paris, 1816.

E. TATHAM. Observations on the scarcity of Money, and its effects upon the public. 8°. London, 1816. (In "The Pamphleteer.")

J.-A. LETRONNE. Considérations générales sur l'évaluation des monnaies grecques et romaines, et sur la valeur de l'or et de l'argent avant la découverte de l'Amérique. 4°. Paris, 1817.

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time it is not uncommon to hear that in the presence of the Gold Discoveries, law was powerless!

Of course it should be understood that while Law remained a cause there was a change of monetary conditions; the discovery of the Gold fields and their colonization, like these laws which maintained Gold, were also acts, and of course they cannot be left out of account, but there was in them no centralized power molding the Institution of Money to definite ends. Add to the secrets of the earth the Nature of Man, with his adventurous spirit of gain, and Australia and California are accounted for. Swarms of men sought profit in exhuming the yellow metal from untrodden fields. But would they have sought it as they did if the yellow metal had not been Money? In any event the Monetary Policy of the World remained in the hands of its Laws.

I may in conclusion glance at a truth which has been permitted to assume in the eyes of thinkers proportions so exaggerated as to obscure other truths more important. Monetary laws have been passed by great States and yet have shown themselves powerless. Upon the Statute Books of England, of France, of the United States, are monetary laws which have, for a generation at a time, remained to a large extent a dead letter.

What bearing has this fact upon the Position of Law in the Doctrine of Money? To this I answer, that these facts are entirely in accord with the doctrine I have stated. This point is the favorite stumbling-block of the two extremes in this great controversy concerning the nature of Money; the orthodox "free-trader" in monetary science, who knows no law, but that of "commerce", on one side, and on the other the "Fiat Money man," who sees nothing in Money but a "sign of the will of the Czar."*

In matters of Money as elsewhere the strong rules the weak.

An enactment that conflicts with the habits and interests of the citizen is not as suc-

*In a paper on "Extremes of opinion on the causation of the Value of Money, or the *Laissez faire* theory and Iwan Possoschkow," printed in an Appendix to "Silver and Gold," 1877, I have tried fully to set forth this contrast.

CLEYNMANN. Aphorismen aus dem Fache der Münzgesetzgebung. Frankft., 1817.
CONSIDÉRATIONS sur la sortie du numéraire à l'occasion de la situation commerciale et financière de la France. 8°. Paris, Nov. 1818.
Sir J. SINCLAIR. The approaching crisis; or, impracticability of resuming cash payments at the bank. 8°. London, 1818.
Le comte G. GARNIER. Histoire de la monnaie, depuis les temps de la plus haute antiquité jusqu'au règne de Charlemagne. 8°. Paris, 1819. 2 vol.
E. GOMPERTZ. Theoretic discourse on the nature and property of Money. 8°. London, 1820.
R. MUSHET. Tables exhibiting the gain and loss to the fundholder, arising from fluctuations in the value of the currency, 1820–21. 8°. London, 1821.
CLEYNMANN. Materialien für Münzgesetzgebung. Frankfort, 1822.
JOSEPH LOWE. Present condition of England, etc. London, 1822; New York, 1824.
C. H. von JAKOB. England nach seinem gegenwaertigen Zustande des Ackerbaues, des Handels und der Finanzen betrachtet, von Joseph Lowe, Esq. Nach dem Englishen bearbeitet, und mit Anmerkungen und Zusaetzen versehen. Leipzig, 1823.
C. C. ANDRE. Neueste Zahlenstatistik, etc. Stuttgart, 1823.
Sir WALTER SCOTT. Letters of Malachi Malagrowther on the proposed change of Currency, etc., etc. Edinburgh, 1826.
JAMES GRAHAM. Corn and Currency. 2d ed. London, 1826.
RICHARD CRUTTWELL, LL.B., Rector of Spexhall, Suffolk. A Treatise on the State of the Currency at the present time, 1824–5: Being a full and free Exposition of the erroneous Principles of Mr. Ricardo, the Earl of Liverpool, Mr. Huskisson, Mr. Peel, Dr. Copleston, Mr. Brougham, Mr. Baring, Mr. Western, Mr. G. Bennett, Mr. Mushet, Edinburgh and Quarterly Reviewers, and others: showing the numberless evils now daily resulting from our present false, unjust, and ever-fluctuating Money-Standard; recommending also a plan for *fixing* the same in future upon a permanently reduced gold-scale of continental prices, taking wheat at an average of 40s. instead of 80s. the quarter. London, 1825.
J. L. KLÜBER. Das Münzwesen in Deutschland nach seinem jetzigen Zustande, mit Grundzügen zu einem Münzverein deutscher Bundesstaaten. Stuttgart und Tübingen, 1828.

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cessful as one which enlists these habits and interests on its side. In like manner an enactment of one nation which is in conflict with the remainder of its laws, or which is in opposition to the stronger laws of other nations, will naturally fail to attain its avowed purpose. Its avowed purpose, or the purpose imputed to it, is, in a word, not the test of its power. The question whether this or that enactment will exert a certain influence upon the demand or supply of Money is not, as the two extremists would suppose, a question of phraseology, but a question of fact. For example, the Laws of Legal Tender a few years ago made the Gold Dollar a Legal Tender at par with Greenbacks in New York, and the Greenback Dollar a Legal Tender at par with Gold in San Francisco. In New York it was the Greenback and not the Gold Dollar, while in California it was the Gold Dollar and not the Greenback which circulated. And yet this fact is not derogatory to the views I have stated.

But in answering the inquiry, what is the wisest coinage policy for the United States, I can perhaps even more forcibly illustrate the sincerity of the views here stated. Since the Silver Question came to the foreground, in 1876, I have endeavored to point out not merely the unwisdom but the danger of coining any Silver at all in the United States; and I did this in the interest of Bimetallic Union.

Free Coinage here while Europe rejected Silver would mean Silver-Monometallism in time and a temporary success for Gold-Monometallism in Europe; and to create a de-

LEIZMANN. Abriss einer Geschichte der gesammten Münzkunde. Erfurt, 1828.
HENRY BURGESS. A Petition to the honorable the Commons House of Parliament to render manifest the errors, the injustice and the dangers of the measures of Parliament respecting Currency and Bankers; suggesting more just and practicable arrangements, and praying for an investigation. Accompanied with illustrations and reflections, which shew the utter impracticability of perfecting the present policy and the danger of further attempts to enforce that policy. London, 1829.
N. W. SENIOR. Three lectures on the cost of obtaining money, and on some effects of private and government paper money. 8°. London, 1830.
W. J. R. S. JACOB. An historical inquiry into the production and consumption of the precious metals. 2 vols. London, 1831.
ALBERT GALLATIN. Considerations on the Currency and Banking system of the United States. Philadelphia, 1831.
L. A. BRÜEL. Materialien für die zu erwartende Reform des deutschen Münzwesens. 2. verb. Aufl. Hannover, 1831.
J. G. HOFFMANN. Drei Aufsaetze über das Münzwesen. Berlin, 1832.
JAMES TAYLOR. An Essay on Money; its origin and use. Lond., 1832.
AN ESSAY on the Standard and Measure of Value. By the author of an "Essay on Money." 2nd edition. Lond., 1832.
D. G. LUBE. Argument against the gold standard, with an examination of the systems of Modern economists. 8°. London, 1832.
WILLIAM M. GOUGE. A Short History of Paper Money and Banking in the United States, etc., etc. 372 pp. Philadelphia, 1833.

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mand for Silver here was in fact to delay that process of education by which Europe was prepared to profit, unless we should relieve her for a time of the necessity of study.

A law for restoration of Silver on a par with Gold in our Coinage, while it would be nominally Bimetallic Legislation, would thus only further the ends of Monometallism, while the true policy for the time was to remain Monometallic in practice, coining only Gold, but to become Bimetallic in precept, exerting a vigorous and aggressive influence to convince Europe by the logic of domestic disaster, as well as by argument, that the wisest course for her own interest was to join the United States in the concurrent restoration of Silver.

A second point in the following list, an explanation of which may prove suggestive, is the absence of classification, the works cited, other than official publications, being placed simply in the order of their publication. This was done not merely for convenience sake, but with a view to the truths just outlined. As I have elsewhere said, Money is an institution not of one nation, but of the world, and the institution, in order to be understood, must be studied as a whole.

The forbidding physiognomy of this list may therefore at least serve to suggest to some student of Money that solidarity of interests of the different nations in regard to Money, which is the great unlearned lesson of the time.

In conclusion, I may allude to the presence in this list of products the most various of local or national controversy, past as well as present.

The Monetary Policy of nations being largely the outcome of such controversy, it is in the records of them that the springs of political action are to be detected.

The statesman, like the soldier, cannot afford to underrate his enemy, and in a review of the Material for the Study of Monetary Policy it is well that the entire field should be mapped out, and the conflicting forces numbered, even though pages should be cumbered with titles which are but melancholy commentaries on the text, "See with what little wit the world is ruled."

F. B. W. HERMANN. Ueber den gegenwaertigen Zustand des Münzwesens in Deutschland und die neueren Vorschlaege zur Abstellung seiner Gebrechen. Archiv der politischen Oekonomie, etc., 1. Bd., SS. 58–100 und SS. 141–206. Heidelberg, 1835.

MONETARY system; the inconvenience of a gold standard and circulating medium stated, with a proposed substitute. By J. M. C. 8°. London, 1837.

W. H. MORRISON. Observations on the system of Metallic Currency adopted in this Country. 8°. London, 1837.

MONEY, the representative of value, etc. [Anon.] 79 pp. 8°. London, 1837.

A. VON HUMBOLDT. Ueber die Schwankungen der Goldproduction, mit Rücksicht auf staatswirthschaftliche Probleme. (Deutsche Vierteljahrs-Schr., IV, SS. 1–40, Stuttg., 1838.)

W. JACOB. Ueber Production und Consumtion der edlen Metalle. Eine geschichtliche Untersuchung. A. d. Engl., mit Benutzung hauptsaechlich mitgetheilter Verbesserungen des Verfassers und mit eigenen Zusaetzen versehen von C. T. Kleinschrod. 2. Thle. Lpz., 1838.

C. MEES. Dissertatio de vi mutatæ monetæ in solutionem pecuniæ debitæ. Roterdam, 1838.

J.-G. HOFFMANN. Die Lehre vom Gelde als Anleitung zu gründlichen Urtheilen über das Geldwesen, mit besonderer Rücksicht auf den preussischen Staat vorgetragen. Berlin, 1838.

MONEY AND BANKING. By a Citizen of Ohio. Cincinnati, 1839.

G. TUCKER. Theory of money and banks investigated. 8°. Boston, 1839.

G. W. NORMAN. A letter to Charles Wood, Esq., M. P., on money and the means of economizing the use of it. 8°. London, 1840.

J.-G. HOFFMANN. Die Zeichen der Zeit im deutschen Münzwesen; als Zugabe zu der Lehre vom Gelde. Berlin, 1841.

ALBERT GALLATIN. Suggestions on the Banks and Currency of the several United States in reference principally to the Suspension of Specie Payments. New York, 1841.

F. NEBENIUS. Ueber die Schwankungen des circulirenden Mediums in Europa und deren Einfluss auf die Geldpreise der Dinge in den letzten fünf Decennien. (D. V.-Schr., XII, 1–72.) Stuttg., 1841.

VOM WESEN des Geldes. Von einem russischen Schriftsteller. Lpz., 1842.

J. W. BOSANQUET. Metallic, paper, and credit currency. 8°. London, 1842.

J. HELFERICH. Von den periodischen Schwankungen im Werthe der edlen Metalle, von der Entdeckung Amerika's bis zum Jahre 1830. Eine historisch-oekonomische Monographie. Nürnberg, 1843.

ST. CLAIR DUPORT. De la production des métaux précieux au Mexique, etc. Paris, 1843.

LÉON FAUCHER. Recherches sur l'or et l'argent considérés comme étalon de la valeur. 8°. Paris, 1843.

THEORY OF MONEY. [Anon.] 8°. London, 1844.

ROGER RUDING. Annals of the coinage of Great Britain and its dependencies, from the earliest period of authentic history to the end of the 5th year of His Majesty King George III. 4 vols. London, 1817; 2d edit., 6 vols. text, 1 vol. atlas, 1819; 3d edit., (continued to the reign of Victoria and improved) 3 vols. 4°. 1845.

A. ALISON. England in 1815 and 1845; or a sufficient and a contracted currency. 8°. London, 1845.

MICHEL CHEVALIER. Des mines d'argent et d'or du Nouveau Monde. (Revue des Deux Mondes, nouv. sér., XVI, 980–1035, Paris, 1846.)

ADOLF SOETBEER. Denkschrift über Hamburgs Münzverhaeltnisse. Hamburg, 1846. 4°.

W. WARD. Remarks on the monetary legislation of Great Britain. London, 1847.

M. C. LEBER. Essai sur l'appréciation de la fortune privée au moyen âge, relativement aux variations des valeurs monétaires et au pouvoir commercial de l'argent, suivi d'un examen critique des tables de prix du marc d'argent, depuis l'époque de Saint-Louis. 2e édition, revue et augmentée. 8°. 1847.

JAMES WILSON. Capital, Currency, and Banking. London, 1847.

THOMAS DOUBLEDAY. A Financial, Monetary, and Statistical History of England. 2 v. London, 1847.

W. NOERDLINGER. Vorschlaege zu einem allgemeinen deutschen Münz-, Mass- und Gewichtsystem. Mai, 1848.

C. J. BERGIUS. Vorschlaege zur Verbesserung des preussischen Münzwesens. Archiv der politischen Oekonomie, etc., N. F., VII. Bd., Heidelberg, 1848.

JOHN GRAY. Lect. on the Nature and Use of Money. Edinb., 1848.

J. L. COMSTOCK. A History of the Precious Metals. Hartford, 1849.

MICHEL CHEVALIER. Cours d'économie politique fait au Collége de France. 3e vol. La monnaie. Paris, 1850.

ANSICHTEN über Gold- und Silberwaehrung in Bremen. Bremen, 1850.

Die ENTDECKUNG der Goldschaetze in Californien und deren Folgen. D. V.-Schr., XVI, 175–204, 1850.

J. T. DANSON. Of the quantity of gold and silver supposed to have passed from America to Europe, from the discovery of the former country to the present time. (Jour. of the Stat. Soc. of London, XIV, 11–44, 1851.)

MICHEL POISAT. Discours et rapports sur les monnaies et sur les métaux précieux. Paris, 1851.

C. COQUELIN. De la dépréciation de l'or, et du système monétaire français. (Journal des Economistes, T. XXIX, 1851.)

W. C. MEES. Het Muntwezen van Nederlandsch-Indie. Amsterdam, 1851.

L. FAUCHER. De la production et de la démonétisation de l'or.—La démonétisation en Hollande et la production en Russie, en Amérique et dans l'Australie. (Revue des Deux Mondes, Août 1852.)

J. WARD. A history of gold as a commodity and as a measure of value. Its fluctuations both in ancient and modern times, with an estimate of the probable supplies from California and Australia. London, 1852.

F. SCHEER. A letter to Th. Baring, Esq., on the effects of the Californian and Australian gold discoveries. London, 1852.

OBSERVATIONS on the effect of the Californian and Australian gold, and on the impossibility of continuing the present standard in the event of gold becoming seriously depreciated. London, 1852.

M. G. DU PUYNODE. De la monnaie, du crédit et de l'impôt. 2 vols. 8°. Paris, 1852.

A. SOETBEER. Andeutungen in Bezug auf die vermehrte Goldproduktion und ihren Einfluss. Hamburg, 1852.

D. C. STEIJN PARVÉ. Geschiedenis van het munt- en bankwezen in Nederlandsch-Indie. Zalt-Bommel, 1852.

OBSERVATIONS on the effect of the Australian and Californian gold. [Anon.] 32 pp. London, 1852.

LOUIS HALPHEN. De la démonétisation de l'or. Paris, 1852.

EDME COLLOT. De la démonétisation de l'or. Paris, 1852.

P. F. STIRLING. The Australian and Californian gold discoveries and their probable consequences, etc. London, 1853.

W. AUSTIN. On the imminent depreciation of gold and how to avoid loss. London, 1853.

DIE WICHTIGKEIT der Silberwaehrung für Deutschland. Frankfurt a. M., 1853.

W. NEWMARCH. The new supplies of gold; facts and statements relative to their actual amount, and their present and probable effects. 1853.

A. VROLIK. Verslag van al het verrigte tot herstel van het Nederlandsche muntwesen. Utrecht, 1853.

——— Le système monétaire du Royaume des Pays-Bas, la refonte des vieilles monnaies d'argent et la démonétisation de l'or. Utrecht, 1853.

RICHARD H. WALSH. Elementary Treatise on Metallic Currency. Dublin, 1853.

THOMAS WILSON. Jottings on Money; or a few remarks on Currency, Coinage and a new Decimal System, with the Theory of annular coinage. London, 1853.

L. FAUCHER. Remarks on the demonetization of gold. From the French. 8°. London, 1853.

J. BOWRING. The decimal system in numbers, coins, and account: especially with reference to the decimalisation of the currency and the accountancy of the United Kingdom. London, 1854.

J. LAURIE. Decimal coinage, etc. London, 1854.

J. D. WHITNEY. The metallic wealth of the United States described and compared with that of other countries. Philadelphia, 1854.

S. OPPENHEIM. Die Natur des Geldes. Mainz, 1855.

O. K. Ueber Gold- und Silberwaehrung. Frankfurt a. M., 1855.

V. LANJUINAIS. Nouvelles recherches sur la question de l'or. (Rev. d. D. M., Juillet 1855.)

A. P. FRICHOT. Etudes monétaires au point de vue de l'adoption par tous les peuples de l'uniformité de poids, de mesures et de monnaies. Paris, 1855.

A. SOETBEER. Beitraege und Materialien zur Beurtheilung von Geld- und Bankfragen, mit besonderer Rücksicht auf Hamburg. 4to. Hamburg, 1855.

The Currency Question, etc. London, 1855.

A. SOETBEER. Denkschrift, betreffend die Einführung der Goldwaehrung in Deutschland, mit besonderer Rücksicht auf die Hamburger Bankvaluta. Ausgearbeitet im Auftrage der Commerz-Deputation in Hamburg. Fol. Hamburg, 1856.

——— Das Gold. Eine geschichtliche und volkswirthschaftliche Skizze. (Gegenwart, Bd. —, Lpz., 1856.)

C. TARASSENKO-OTRESCHKOFF. De l'or et de l'argent, leur origine, quantité extraite, etc. Tome I. Paris, 1856.

Die deutsche Münzeinigung. (Deutsche Vierteljahrschrift, Hft. LXXIII.) Stuttgart, 1856.

Die deutsche Münzeinigung. D. V.-Schr., LXXIII. Stuttg., 1856.

G. F. KOLB. Gold- oder Silberwaehrung? (Zeitschrift für die gesammten Staatswissenschaften, Bd. XII, SS. 487–535.) Tübingen, 1856.

V. BAUMGARTNER. Die edlen Metalle und ihre natürliche Rangordnung als Geldstoffe. Wien, 1857.

AMASA WALKER. Nature and Uses of Money and Mixed Currency. 8vo. Boston, 1857.

EM. LEVASSEUR. La question de l'or.—Les mines de Californie et d'Australie.—Les anciennes mines d'or et d'argent.—Leur production.—La distribution et l'emploi des métaux précieux.—L'influence des nouvelles mines d'or sur la société.—4 vols. 8vo. Paris, 1858.

KENNER. Die Anfaenge des Geldes. Wien, 1858.

HENRY NICHOLS SEALY. Treatise on Coins, Currency, and Banking; with observations on the Bank Act of 1844. London, 1858.

H. DE MATIGNY. De la disparition de la monnaie d'argent et de son remplacement par la monnaie d'or, ou situation monétaire de la France en 1859. 2d ed. Paris, 1859.

MICHEL CHEVALIER. De la baisse probable de l'or, des conséquences commerciales et sociales qu'elle peut avoir et des mesures qu'elle provoque. Paris, 1859.

——— On the probable fall in the value of gold, etc. Translated from the French, with preface by R. Cobden. Manchester, 1859.

OVERSTONE AND OTHERS. Tracts and other publications on metallic and paper currency, edited by J. R. Mac Culloch, and privately printed for Lord Overstone's friends. 6 vols. 1857–59.

ESQUIROU DE PARIEU. La question monétaire. Revue contemporaine, 1859.

BENNEAU. Quelques vues sur l'émission d'une nouvelle monnaie d'or en Belgique. Bruxelles, 1859.

STEPHEN COLWELL. The Ways and Means of Payment: a full analysis of the credit system, with its various modes of adjustment. Philadelphia, 1859.

M. O. L. La situation monétaire de la Suisse en Septembre 1859. Traduit de l'Allemand par J. Malou. Bruxelles, 1859.

J. MALOU. La question monétaire. Bruxelles, Oct. 10, 1859.

A. MOREL. Etudes de la question monétaire à propos de la brochure de M. Malou. Bruxelles, Nov. 10, 1859.

W. BARNES. Views of Labour and Gold. London, 1859.

E. DE PARIEU. La question monétaire en France. Revue contemporaine, 1860.

E. DE LAVELEYE. La question de l'or en Belgique. Bruxelles, 1860.

W. NOERDLINGER. Die Zukunft des metrischen Systems und die deutsche Münz-, Mass- und Gewicht-Einigung. Stuttgart, 1860.

F. KELLER. Die Gold- und Silberfrage. Ein Versuch. St. Gallen, 1860.

BARON COGEL. Cours légal de la monnaie d'or française. 8vo. Bruxelles, 1860.

CH. DE COCQUIEL. La chambre de commerce d'Anvers et la question de l'or. Bruxelles, 1860.

J. MALOU. De l'adoption légale de l'or français. 8vo. Bruxelles, 1860.

F. HAUK. La question monétaire du point de vue pratique. Bruxelles, 1860. 8vo.

—— ROSÉ. De la question monétaire en Belgique. 8vo. Bruxelles, 1860.

—— CAMPAN. La question de l'or en Belgique. 8vo. Bruxelles, 1860.

M. X. Simples questions à propos de la question monétaire. 8vo. Bruxelles, 1860.

DE HAERNE. La question monétaire considérée en général et dans ses rapports avec l'Angleterre, la France, la Suisse et la Belgique. 8vo. Bruxelles, 1860.

H. WEIBEZAHN. Die deutsche Münzfrage. Versuch einer Loesung derselben in einheitlicher Richtung, unter Anbahnung des Ueberganges zur Goldwaehrung. Rinteln, 1861.

C. MORATO ROMA. De la monnaie. 8vo. Lisbonne, 1861.

LÉON. Question monétaire. Lettre à M. le directeur du Journal des Economistes. (Journal des Econ., Janvier 1861.)

J.-E. HORN. Le double étalon monétaire. (Journ. des Econ., Juillet 1861.)

——— Où en est la crise monétaire? (Journ. des Econ., Juillet 1861.)

A. BLAISE. La question monétaire. (Journ. des Econ., Août 1864.)

E. DE PARIEU. La question monétaire française dans ses rapports avec la législation monétaire des pays étrangers. (Jour. des Econ., 15 Avril 1861.)

E. DE PARIEU. Etat de la question monétaire en 1861. (Revue contemporaine, 31 Mai 1861.)

A. SOETBEER. Verhandlung des ersten deutschen Handelstages zu Heidelberg, Mai 1861. Nach den stenographischen Aufzeichnungen. Berlin, 1861. SS. 31—46 u. 97—100, betr. Herstellung einer allgemeinen deutschen Münzeinheit.

——— Die Frage der deutschen Münzeinheit, mit besonderer Rücksicht auf Hamburg und Bremen. Für den deutschen Handelstag als Manuscript gedruckt. Heidelberg, 1861.

WILLIAM P. BLAKE. Silver ores and silver mines, etc. New Haven, 1861.

JOHANN FRIEDRICH HAUSCHILD. Zur Geschichte des deutschen Mass- und Münzwesens in den letzen sechzig Jahren. 117 pp. Frankfurt a. M., 1861.

INFORME sobra Moneta. Madrid, 1861.

DIE DEUTSCHE MÜNZFRAGE. Versuch einer Lösung derselben in Einheitlicher Richtung unter Anbahnung des Uebergangs zur Goldwährung. Rinteln, 1861.

A. SOETBEER. Die Goldfrage und deren Einfluss auf das Münzwesen der handeltreibenden Laender. (Zeitschrift für die gesammten Staatswissenschaften, Bd. XVIII, SS. 1–38.) Tübingen, 1862.

JACOB. Des monnaies divisionnaires d'argent. (Journ. des Econ., Mars 1862.)

R. DE FONTENAY. Documents nouveaux pour servir à l'étude de la question monétaire. (Journ. des Econ., Novembre 1862.)

P. LAUR. De la production des métaux précieux en Californie. Paris, 1862.

ADOLF WAGNER. Die Geld- und Kredit-Theorie der Peel'schen Bankakte. Wien, 1862.

H. LANDRIN. Traité de l'or. Monographie, histoire naturelle, exploration, statistique, etc. Paris, 1863.

A. SOETBEER. Goldwaehrung und deutsche Münzverhaeltnisse. (Vierteljahrschrift für Volkswirthschaft, etc., I. Jahrg., 3. u. 4. Bd., Berlin.) 1863.

W. S. JEVONS. A serious fall in the value of gold ascertained, and its local effect set forth. With two diagrams. London, 1863.

N. P. VAN DEN BERG. De kwestie over den geldomloop in Nederlandsch-Indie. Batavia, 1863.

NORTHCOTE COOKE. The Rise, Progress, and Present Condition of Banking in India. Calcutta, 1863.

W. NASSAU LEES. The drain of silver to the East and the currency of India. London, 1864.

W. R. MANSFIELD. On the introduction of a gold currency into India. London, 1864.

W. SCHAAKE. Ueber die Einführung einer neuen Goldmünze statt der zu beseitigenden Goldkrone. Vortrag gehalten am 30. Juli 1864. Hildesheim, 1864.

BORDET. L'or et l'argent en 1864. Paris, 1864.

SIR C. TREVELYAN. Minute on a gold currency for India. 1864.

TRAICTIE des Monnoies de *Nicole Oresme* et Traité de la Monnoie de *Copernic*. Texte latin et Traduction française publiés et annotés par *M. L. Wolowski*. Folio. Paris, 1864.

EXTRAITS des Enquêtes Parlementaires Anglaises sur les *"Questions de Banque."* Traduits et publiés par la Banque de France, et sous la direction de MM. Coullet et Juglar. Enquêtes de 1810–1841. Enquête de 1832 sur le Renouvellement de la Charte de la Banque d'Angleterre. Enquête de 1840 sur les Banques d'Emission. Enquête de 1848 sur la crise Commerciale de 1847 (Chambre des Lords). Enquête de 1848 sur la crise Commerciale. Enquête de 1854 sur la legislation des Banques. Paris, 1865.

M. NAHUYS. De l'établissement d'une monnaie universelle. Utrecht, 1865.

H. GROTE. Die Geldlehre, insbesondere der Wiener Münzvertrag von 1857; die Goldkronen und die deutschen Handelsvereine. Leipzig, 1865.

A. SOETBEER. Verhandlungen der vom Hamburgischen Kaufmanns-Convent zur Prüfung der Valuta-Frage niedergesetzten Commission. Veroeffentlicht seitens der Commerz-Deputation. 4°. Hamburg, 1865.

O. WEISHAUPT. Bericht, betreffend die Beschaffung einer neuen Goldmünze für die durch den Münzvertrag vom 24. Januar 1857 verbundenen Staaten. Cassel, 1865.

E. DE PARIEU. La question monétaire de France et à l'étranger. (Revue contemporaine, 31 décembre 1865.)

A. SOETBEER. Zusammenstellung der Erklaerungen von 35 deutschen Handelskammern in Betreff der Goldausmünzung in Deutschland. Herausgegeben vom bleibenden Ausschusse des deutschen Handelstages im Maerz, 1865. Berlin.

——— Verhandlungen in Betreff deutscher Münzeinheit und einer neuen Vereinsgoldmünze in der 3. Sitzung des dritten deutschen Handelstages am 27, September 1865. Berichterstatter Ad. Soetbeer. Berlin, 1865.

——— Produktion der Edelmetalle während der Jahre 1849 bis 1863. (Vierteljahrschrift für Volkswirthschaft, etc., III. Jahrg., 2. Bd., Berlin, 1865.)

——— Die fünfte Sitzungsperiode des internationalen statistischen Congresses in Berlin vom 4. bis 12. September 1863. 2 Bde. Berlin, 1865. II. Bd., S. 343–390. (Sechste Section. Die Einheit der Münzen, Masse und Gewichte als wichtigstes Hilfsmittel der vergleichenden Statistik.)

HENRI CERNUSCHI. Mécanique de l'Echange 8°. 1865.

C. ROSWAG. Les métaux précieux considérés au point de vue économique. Paris, 1865.

A. SOETBEER. Produktion der Edelmetalle während den Jahren 1848–1863. (Berliner V. J. St. für Volkswirthschaft, etc., 1865.)

HENRI CERNUSCHI. Contre le billet de Banque. 18°. 1866.

E. DE PARIEU. L'union monétaire de la France, de l'Italie, de la Belgique et de la Suisse: le Münzverein latin. (Revue contemporaine, 31 octobre 1866.)

MICHEL CHEVALIER. Cours d'économie politique, etc. III. vol., 2 éd., refondue et considérablement augmentée. La monnaie. Paris, 1866.

F. HENDRIKS. Decimal coinage: a plan for its immediate extension in England, in connection with the international coinage of France and other countries. London, 1866.

N. P. VANDEN BERG. Bankwezen en Banken in Britisch-Indie. Eene geschiedkundige schets. Batavia, Java, 1866.

JAMES E. THOROLD ROGERS. A history of Agriculture and prices in England. A. D. 1259–1400. 2 vols. London, 1866.

AMASA WALKER. The Science of Wealth [chiefly devoted to the Money question]. 8mo. Boston, 1866.

A. BRÜCKNER. Finanzgeschichtliche Studien. Kupfergeldkrisen. St.-Petersburg, 1867.

SCHULZ, L. H. A. De metallis nobilibus ex Europa in Asiam defluentibus. Halis, 1867.

A. E. CHERBULIEZ. Nature de la monnaie complémentaire de la convention de 1865. (Journ. des Econ., Janvier 1867.)

BERICHT über die Verhandlungen des neunten Congresses deutscher Volkswirthe zu Hamburg, 26.–29. August 1867, 3. Sitz.: Münzeinheit und Goldwaehrung. Berlin, 1867.

C. VON HOCK. Der Münzvertrag vom 24. Januar 1857 und seine Gebrechen. (Oesterr. Revue, 1867, 2. Heft.) Wien.

BERICHT über die Verhandlungen des neunten Congresses deutscher Volkswirthe zu Hamburg am 26.–29. August 1867, dritte Sitzung: Münzeinheit und Goldwaehrung. Berlin, 1867.

A. LAMMERS. Deutsche Münzreform. (Preuss. Jahrbücher, Bd. XX, Heft 5, Berlin, 1867.)

E. DE LAVELEYE. La monnaie internationale. (Rev. d. D. M., Avril 1867.)

VASQUEZ QUEIPO. La cuadruple Convencion monetaria considerada en su origen, objeto, etc. Madrid, 1867.

T. MANNEQUIN. Uniformité monétaire. Rapport au comité syndical des républiques de l'Amérique centrale et méridionale. Paris, 1867.

E. DE PARIEU. De l'uniformité monétaire. (Journal des Economistes, Juin 1867.)

FREDERICK MOUNDER. The causes and cure of Monetary Panics. London, 1867.

JOHN P. GASSIOT. Monetary Panics and their Remedy, etc. London, 1867.

JOSÉ POLO DE BARNABÉ Y BORRAS. [Report to the Spanish Government on the Conference of 1867.] Madrid, 1868.

SURRA Y RULL. [Various essays on the Monetary Question.] Madrid, 1868.

E. B. ELLIOTT. The Metrical Unification of International Coinage. Washington, 1868.

DER UEBERGANG zur Goldwaehrung. Eine Sammlung von Preisschriften, herausgeg. von dem bleibenden Ausschuss des deutschen Handelstages. Berlin, 1868.

Darin enthalten:

H. GROTE. Der Uebergang von der Silberwaehrung.

G. MILLAUER. Die Einführung der Goldwaehrung in Deutschland.

H. WEIBEZAHN. Zur deutschen Münzreform.

R. BACH. Die nothwendingen Vorbereitungen für den Uebergang zur Goldwaehrung.

F. G. KILLERMANN. Beantwortung der Preisfrage.

VERHANDLUNGEN des vierten deutschen Handelstages über die Frage der Herstellung deutscher Münzeinheit und Annahme der Goldwaehrung. Berlin, am 20. und 21. Oktober 1868. 4°. Berlin, 1868.

L. WOLOWSKI. De l'influence du change sur le marché monétaire. (Revue des Deux Mondes, Septembre 1868.)

——— Les métaux précieux et la circulation fiduciaire. (Journ. d. Econ., Octobre 1868.)

——— Quelques notes sur la question monétaire. Publié comme manuscrit. Paris, 1868.

MICHEL CHEVALIER. Lettre à M. Ed. Bertin, directeur gérant du Journal des Débats, (Journal des Débats, 19 Octobre 1868.)

——— De l'établissement d'une monnaie universelle. (Journ. d. Econ., Nov. 1868.)

P. ROUX. Enquête monétaire. (Journ. d. Econ., Juin 1868.)

LÉON. La Convention monétaire du 24 Décembre et l'uniformité des monnaies. Paris, 1868.

T. N. BÉNARD. Enquête anglaise sur la monnaie internationale. (Jour. d. Econ., Décembre 1868.)

E. SEYD. Bullion and foreign exchanges theoretically and practically considered; followed by a defense of the double valuation, with special reference to the proposed system of universal coinage. 8vo. London, 1868.

——— The practical proposals for an international coinage, etc. (Economist, December, 1868.)

H. WEIBEZAHN. Der Goldgulden als die demnaechstige deutsche Rechnungsmünze. 2. verm. Ausg. Koeln und Leipzig, 1868.

G. D. AUGSPURG. Zur deutschen Münzfrage. Bremen, 1868.

——— Zur deutschen Münzfrage. II. Nachtraege. Bremen, 1868.

H. DUBOIS-CAPLAIN. Lettre à M. Dumas sur la démonétisation de l'argent et la fausse monnaie légale. Paris, 1868.

E. DE PARIEU. Situation de la question monétaire internationale. (Journal des Economistes, Avril 1868.)

——— La question monétaire, et l'opportunité de sa solution. (Revue contemporaine, 30 Juin 1868.)

——— Lettre à M. Ruggles. (Journal des Economistes, Septembre 1868.)

Colonel J. T. SMITH. Remarks on a gold currency for India. London, 1868.

Colonel BALLARD. Remarks on a gold currency for India. Bombay, 1868.

COURCELLE-SENEUIL. Projet d'une monnaie internationale. (Journ. des Econ., Avril, 1868.)

CH. LE TOUZE. De l'uniformité monétaire et de l'unité d'étalon. (Journ. des Econ., Mars 1868.)

——— Nécessité de résoudre la question monétaire. (Journ. des Econ., Juillet 1868.)

——— La question monétaire et le rapport de la Commission. (Courrier de la Gironde, 24 Avril 1868.)

——— La Convention monétaire du 25 Décembre 1865, et la Commission anglaise. (Cour. de la Gironde, 27 Novembre 1868.)

P. J. BACHIENE. De internationale Munt-Conferentie in 1867. Gravenhage, September 1868. (Overgedruckt uit de Economist, 1868.)

ENGELENBURG. Proeven van het ontwerpen ter invoering van het frankenstelsel, etc. Nimwegen, 1868.

J. T. SMITH. Remarks on a gold currency for India and proposal of measures for the introduction of the British sovereign, also a suggestion regarding international coinage. London, 1868.

DEUTSCHLANDS Aufgabe in der Münzfrage. Bremen, 1868.

G. HARTMANN. Ueber den rechtlichen Begriff des Geldes u. d. Inhalt v. Geldschulden. Braunsch., 1868.

H. CONTZEN. Ueber die Geschichte des Geldes und über Goldwaehrung. Leipzig, 1868.

L. GOLDSCHMIDT. Handbuch des Handelsrechts. 1. Bd., 2. Abtheil. (Drittes Buch, Abschnitt II, Das Geld, §§ 91–109, S. 1060–1231.) Erlangen, 1868.

W. STANLEY JEVONS. On the condition of the metallic currency of the United Kingdom, with reference to the question of international coinage. London, November, 1868. Journ. of the Statistical Society of London, Vol. XXXI, part IV.

L. WOLOWSKI. La question monétaire. 8vo. 1878.

——— L'Or et l'Argent. 8vo, 1868; 2e éd., 1870.

A. SOETBEER. Denkschrift, betreffend deutsche Münzeinigung. Den hohen deutschen Regierungen überreicht vom bleibenden Ausschuss des deutschen Handelstages. Berichterstatter Ad. Soetbeer. 4to. Berlin, 1869.

——— Bedenken gegen die sogenannte Doppelwaehrung.—Der Uebergang zur Goldwaehrung in Deutschland. (Aufsaetze im Bremer Handelsblatt, Jahrg. 1869, Nrn. 899, 924–927.)

——— Zur deutschen Münzfrage. I–III. (Hamburgische Boersenhalle. Maerz 1869.)

E. DE PARIEU. La question monétaire et la démonétisation de l'argent. I–V. article. (Courrier de la Gironde, Janvier et Février 1869.)

E. DE PARIEU. Les conférences monétaires internationales de 1865 et de 1867, et leurs résultats. (Journal des Economistes, Février 1869.)

——— La monnaie internationale.—Etat actuel de la question. (Revue contemporaine, 31 Juillet 1869.)

——— Progrés récents et avenir de l'unification monétaire. (Journal des Economistes, Décembre 1869.)

V. BONNET. La question de l'or. I. La dépréciation de la monnaie. II. Le double étalon monétaire. III. Les différents systèmes de monnaie internationale. (Rev. d. D. M., Octobre et novembre 1858, Mars 1869.)

A. BLAISE. La monnaie internationale. (La Liberté, 30 Mars 1869.)

——— Des conclusions adoptées par la Commission française monétaire. (Journ. d. Econ., Avril 1869.)

C. SCHULTZ. Die deutsche Münzreform und der Anschluss an das Frankensystem. Unter Berücksichtigung der gekroenten Preisschrift von H. Grote. Berlin, 1869.

Zur allgemeinen Münzeinheit. Die internationale Münzconferenz zu Paris im Jahre 1867. Uebersetzung, Einleitung und Bemerkungen von Geschwender. Erlangen, 1869.

G. NOTHOMB. Die Weltmünze. (Preuss. Jahrbücher, 1849, II. Bd. Berlin.)

W. BAGEHOT. A practical plan for assimilating the English and American money, as a step towards a universal money. Reprinted from the Economist, with additions and a preface. London, 1869.

N. A. NICHOLSON. Observations on coinage and our present monetary system. 3d ed. London, 1869.

A. GSCHWENDNER. Zur allgemeinen Münzeinheit. Die internationale Münzkonferenz zu Paris im J. 1867. Uebersetzung und Bemerkungen. Erlangen, 1869.

F. XELLER. Die Frage der internationalen Münzeinigung und der Reform des deutschen Münzwesens mit besonderer Rücksicht auf Süddeutschland. Kritisch und geschichtlich beleuchtet. Stuttgart, 1869.

A. SOETBEER. Denkschrift betr. deutsche Münzeinigung. Vom bleibenden Ausschusse des deutschen Handelstages. Berlin, 1869.

J. PRINCE-SMITH. Waehrung und Münze. (Hirth's Annalen des Nordd. Bundes, etc., Jahrg. 1869. Berlin.)

G. D. AUGSPURG. Zur deutschen Münzfrage. III. Gold- und Silberwaehrung. Uebergang zur Goldwaehrung. Papiergeld. Bremen, 1869.

——— Zur deutschen Münzfrage. IV. Wahl des Münzsystems. Hamburg, 1869.

——— Zur deutschen Münzfrage. V. Die Fragen der Münzuntersuchung und ihre Beantwortung vor dem Kriege und waehrend des Krieges. Hamburg, 1870.

R. DE RISDER. De la Monnaie du crédit, etc. 8vo. Gand, 1869.

L. E. DE WOLF. Money; its Uses and Abuses. Chicago, 1869.

C. FEER-HERZOG. L'Unification Monétaire Internationale, ses conditions et ses perspectives. Paris et Genève, 1869.

REPORT of the Association of Chambers of Commerce of the United Kingdom (session Birmingham, Nov. 16 and 17, 1869), Messrs. A. Field, S. S. Lloyd, Jacob Behrens, Ed. Akroyd, M. P., J. Whitwell, M. P., committee.

N. BACH. Ein neuer Vorschlag zur Loesung der deutschen Münzfrage. Buchholz, 1870.

J. EICHELBERG. Vorschlag für eine Einheit in Münze und Waehrung für alle grossen handeltreibenden Staaten. Nach praktischen Erfahrungen ausgearbeitet. Nebst einer Einleitung. Zunaechst mit Rücksicht auf eine Münzeinigung für Deutschland. Frankfurt a. M., 1870.

A. GSCHWENDNER. Zur deutschen Münzeinheit. Vereinigung des Thaler und des Guldenfusses unter sich und mit dem Frankensystem. Als Antrag in die Bayerische Abgeordneten-Kammer gebracht. München, 1870.

H. GROTE. Die Goldwaehrungsfrage.—Allerlei Münzfragen. (Aufsaetse in der Neuen Hannoverischen Zeitung, Maerz und April 1870.)

F. W. E. KUHN. Grundlinien einer decimalen Münz-Ordnung des Norddeutschen Bundes. 4to. Berlin, 1870.

A. G. MOSLE. Das teutonische Münzsystem. Ein Beitrag zur Loesung der deutschen Münzfrage. Zunaechst geschrieben für die Mitglieder des deutschen Handelstags. Bremen, 1870.

M. NAHUYS. Die Münzreform Deutschlands, vom nationalen und internationalen Standpunkt betrachtet. Utrecht, November 1870.

H. WEIBEZAHN. Kritische Umschau auf dem Gebiete der Vorschlaege zur deutschen Münzreform. Koeln und Leipzig, 1870.

——— Deutschlands Uebergang zur Goldwaehrung vermoege der franzoesischen Kriegsentschaedigung. Januar 1870.

VICTOR BONNET. Etudes sur la monnaie. (Paris, 1870.)

E. DE PARIEU. Discours au Sénat impérial. (Discussion relative aux pétitions sur le système monétaire.) Séance du 25 Janvier 1870.

C. FEER-HERZOG. La France et ses alliés monétaires en présence de l'unification universelle des monnaies. 8vo. Paris, 1870.

E. SEYD. Suggestions in reference to the metallic currency of the United States of America. London, 1871.

W. B. PARTEE, (pseud. Nomistake.) The Science of Money. Phila., 1871.

G. D. AUGSPURG. Die wirthschaftlichen Gesetze des Uebergangs zur Goldwaehrung. (Hirth's Annalen des Deutschen Reiches, Jahrgang 1871.) Leipzig.

——— Die Rechnungseinheit und die Uebergangsmassregeln bei der deutschen Münzreform. Berlin, 1871.

B. BOEHMERT. Die Goldausmünzungsfrage in der deutschen Münzreform. Bremen, 1871.

——— Die Gerechtigkeit und das nationale Interesse bei der deutschen Münzreform. Ein Wort an die Mitglieder des deutschen Bundesraths und Reichstags. Zürich, November 1871.

A. SOETBEER. Vorschlaege zur deutschen Münzreform. 3 Aufsaetze. April und Mai 1871.—Die Deutsche Münzreform in besonderer Beziehung auf preussische Thaler und Hamburger Bankgeld. September 1871.—Die Münzreform. September und Oktober 1871.—Deutsche Münzreform. November 1871.

A. BRAUNE. Silberwaehrung oder Goldwaehrung? Für Jedermann verstaendliche Erlaeuterung der Reform des deutschen Münzwesens. Plauen, 1871.

A. DIETRICH. Was werden wir im neuen Deutschland für ein Geld bekommen? Stuttgart, 1871.

A. EGGERS. Zur Münzfrage. I. Einleitung.—Parallelwaehrung, etc. Bremen, Maerz 1871.

——— Zur Münzfrage. II. und III. Einklang mit dem metrischen System.—Anderthalb Gramm, etc. Bremen, April 1871.

——— Zur Münzfrage. IV. u V. Herr Eugen NOTHOMB und Zwangkurskonversion. Den Deutschen in Nordamerika gewidmet. Bremen, Mai 1871.

——— Volkswirthschaftliche Abhandlungen. 1. Hft. Zur deutschen Münzfrage. Der Wilhelmsthaler. I—VI. Bremen, Mai 1871.

——— Volkswirthschaftliche Abhandlungen. 2. Hft. Zur deutschen Münzfrage. VII—IX. Bremen, September 1871.

A. EGGERS. Loesung der deutschen Münzfrage zum Zwecke einer Weltmünze, die Münzverhaeltnisse Nord- und Süddeutschlands und Elsass-Lothringens vermittelnd. Berlin, October 1871.

——— 4. Hft. Zur Münz- und Banknotenfrage.—Die Goldmark mit Zwangskurs nach dem Münzgesetz vom 4. Dezember 1871. Bremen, Dezember 1871.

A. EISENLOHR. Prüfung der Münzreformvorschlaege der preussischen Regierung. Heidelberg. October 1871.—Nachtrag, ebend, November 1871.

C. H. H. FRAND. Die Münzfrage und der diesjaehrige volkswirthschaftliche Congress. Lübeck, 1871.

A. GSCHWENDNER. Zur deutschen, zugleich internationalen Münzeinheit. Die deutsch-franzoesische Münzidentitaet als Münzsystem des deutschen Reichs. Augsburg, 1871.

G. JOHNSTONE STONEY. Das natürliche Münzsystem. Berlin, 1871.

AUSSCHUSS-BERICHT der Handelskammer zu Leipzig über die Frage der Ordnung des deutschen Münzwesens. Leipzig, Maerz 1871.

DIE GOLDWAEHRUNG. Von einem Laien geschrieben. 4to. Sorau, October 1871.

MORITZ MOHL. Zur Münzfrage. Tübingen, June 1871.

——— Ueber die Gefahren einer verfehlten Münzreform. Tübingen, October 1871.

E. NOTHOMB. Rapport sur la loi monétaire Allemande du 4 Décembre 1871. Bruxelles, 1871.

M. QUENSTEDT. Zur deutschen Waehrungs- und Münzfrage. Berlin, 1871.

J. B. SCHNEIDER. Die deutsche Münzfrage. Ein Beitrag zur Loesung derselben. Giessen, February 1871.

——— Die Verhandlungen des volkswirthschaftlichen Congresses in Lübeck über die Geldfragen. Giessen, September 1871.

——— Das neue Münzgesetz. Bremen, November 1871.

E. SEYD. Die Münz-, Waehrungs- und Bankfragen in Deutschland. Elberfeld, 1871.

——— Bemerkungen über das vom Bundesrathe vorgeschlagene neue deutsche Münzgesetz. Elberfeld, 1871.

H. WEIBEZAHN. Deutschlands Münz-Einheit mit Goldwaehrung. Entwurf eines deutschen Reichsmünzgesetzes. Mit 10 Münz-Abbildungen und einer Münz-Tabelle. Leipzig, 1871.

——— Thaler, Kronzehntel oder Goldgulden. Leipzig, 1871.

——— Mark oder Goldgulden, sowie die internationale Seite der deutschen Münzreform. Leipzig, 1871.

F. XELLER. Die Frage der deutschen Münzreform. Stuttgart, 1871.

Bericht über die Verhandlungen des 12. Congresses deutscher Volkswirthe in Lübeck 28.—31. August, 1871.—Münzreform, SS. 58—115.

AN den hohen Bundesrath des deutschen Reichs. Eingabe des bleibenden Ausschusses des deutschen Handelstages, betr. die Münzreform, vom 17. Fol. October 1871.

AN den hohen Reichstag. Petition der Handelskammer in Hamburg in Betreff des Gesetzentwurfs wegen Ausprägung von Reichsgoldmünzen, vom 8. November 1871. Fol.

E. DE PARIEU. La politique monétaire en France et en Allemagne. (Contemporain, Décembre 1871.)

E. DE PARIEU. La question monétaire en 1872 à propos de la nouvelle loi monétaire de l'Allemagne. (Revue de France, 31 Juillet 1872.)

——— La nouvelle loi monétaire du Japon dans ses rapports avec l'unification monétaire universelle. (Extrait du compte-rendu de l'Académie des Sciences morales et politiques, 1872.)

E. DE PARIEU. De la situation des Etats confédérés monétairement, en vertu de la convention du 23 Décembre 1865. (Revue catholique de Louvain, Août 1872.)

——— La question monétaire internationale. (Journal des Economistes, 15 Décembre 1872.)

L. BAMBERGER. Zur deutschen Münzgesetzgebung. (Heft 161 der Sammlung gemeinverstaendlicher wissenschaftlicher Vortraege.) Berlin, 1872.

——— Welches Münzsystem für Deutschland zu befürworten ist. Berlin, 1872.

E. L. JAEGER. Der Uebergang zur Goldwaehrung. Eine national-oekonomische Skizze. Stuttgart, 1872.

A. SOETBEER. Die Hamburger Bankvaluta in ihren Beziehungen zur allgemeinen deutschen Münzreform. Zusammenstellung von Aktenstücken und Nachweisen. Hamburg, 1872.

——— Münzpolitische Aufsætze. 1° Ausmünzung für Privatrechnung.—2° Kosten der Goldausmünzung.—3° Genauigkeit der Ausmünzung.—4° Aufrechthaltung des Münzfusses der Reichsgoldmünzen. Bremer Handelsblatt vom Januar bis April 1872.

JOSEF MEYER. Das Geld. Eine national-oekonomische Studie. Wien, 1872.

M. QUENSTEDT. Die neuen deutschen Münzen. Entstehung, Text und Erlaeuterung des Geldes, betreffend die Auspraegung von Reichsgoldmünzen, etc. Berlin, 1872.

W. ROSCHER. Betrachtungen über die Waehrungsfrage der deutschen Münzreform. Berlin, 1872.

H. WEIBEZAHN. Der Hamburger Waehrungswechsel. Bremen, 1872.

QUESTION Monétaire en Hollande. Bruxelles, 1872.

LEONE LEVI. History of British Commerce, 1763–1870. London, 1872.

BISHOP BERKELEY on Money, being extracts from his celebrated Querist, etc., by James Harvey. Liverpool, 1872.

H. WEIBEZAHN. Der Abschluss der deutschen Münzreform. Leipzig, 1873.

G. D. AUGSPURG. Zur deutschen Münzfrage. VIII. Der Uebergang zur Goldwaehrung in Deutschland. Bremen, 1873.

LA QUESTION MONÉTAIRE. Discussion à la Société d'Economie politique belge, le 16 Novembre 1873. (De Laveleye, Molinari, etc.)

A. SOETBEER. Uebersicht der Literatur über die deutsche Münzfrage in den Jahren 1869—1871. (Jahrbuch für Gesetzgebung des deutschen Reichs, herausgegeben von F. v. Holtzendorff. II. Jahrg. Leipzig, 1873.

——— Zur Münzfrage. I.-III.—Das Reichsmünzgesetz und die Goldauspraegung für Privatrechnung.—Das Münzgesetz.—(Boersenhalle vom 3.—5. u. 22. Maerz, 10. u. 11. April 1873. Hamburg.)

E. DE PARIEU. La question monétaire en 1873. (Revue de France, 31 Mars 1873.)

——— La question monétaire depuis la discussion au Parlement belge. (Revue de France, 31 Décembre 1873.)

BARON D'ABLAING VAN GIESENBURG. Aanmerkingen op het vorslag der munt-commissie. Utrecht, 1873.

W. BAGEHOT. Lombard Street. London and New York, 1873.

J. E. CAIRNES. Essays in Political Econony, theoretical and applied. London, 1873.

C. FEER-HERZOG. Gold oder Silber? Erörterung einer Tagesfrage. Aarau, 1873.

——— Le même en Français. Aarau, 1873.

FRÈRE-ORBAN. La question monétaire, examen du système et des effets du double étalon. 8vo. Bruxelles, 1874.

LÉON WALRAS. Eléments d'économie politique pure. 8vo. Lausanne, 1874.

CARL KNIES. Geld und Credit. Berlin, 1873; 2. vols., 1874.

JOSEF MEYER. Das Geldwesen auf einheitlicher Grundlage. Wien, 1874.

MANNEQUIN. La monnaie et le double étalon, théories et pratiques fausses, principes tirés de l'expérience—Monnaie, valeur, richesse. Solution des questions pendantes, uniformité monétaire, par Th. Mannequin, membre de la Société d'Economie politique de Paris, ancien membre du Comité international des poids, mesures et monnaies à l'Exposition universelle de 1867. 8vo. 1874.

W. STANLEY JEVONS. Money and the Mechanism of Exchange. London and New-York, 1874.

HENRI CERNUSCHI. Or et argent. 8vo. 1874.

AD. LE HARDY DE BEAULIEU. La question monétaire. 8vo. 1874.

E. DE PARIEU. Nouvel état de la question monétaire. (Journal des Economistes, Janvier 1874.)

C. KNIES. Weltgeld und Weltmünzen. Berlin, 1874.

A. SOETBEER. Deutsche Bankverfassung. Erlangen, 1874.

COURCELLE-SENEUIL. Les Opérations de Banque.

E. DE PARIEU. La politique française dans la question monétaire cosmopolite. (Revue de France, 1875.)

——— Lettre à M. Dumas. (Journal des Economistes, et Revue de France, 1875.)

——— La révolution monétaire par la dépréciation de l'argent. (Journal des Economistes, Juillet ou Août 1875.)

LA QUESTION MONÉTAIRE. Lettre à M. Frère Orban, membre de la Chambre des représentants de Belgique, par un Economiste. 8°. 1875.

BERNARDAKIS. De la quantité des métaux précieux, et du chiffre des monnaies, depuis l'antiquité jusqu'à nos jours. Paris, 1875.

G. J. GOSCHEN. Théorie des changes étrangers. Introduction, 2e édition, suivie du rapport, fait au nom de la Commission du budget de 1875, sur le programme de l'indemnité de guerre et sur les opérations de change qui en ont été la conséquence, par M. Léon Say, membre de l'Institut, ministre des Finances, député de la Seine. 8°. 1875.

ALPH. ALLARD. L'or, l'argent et le commerce belge. 8°.

R. H. PATTERSON. The Economy of Capital, or Gold and Trade. London, 1875.

VICTOR BONNET. La Dépréciation de l'argent et la question monétaire. 8vo. Paris, 1875.

M. A. NIENDORF. Die Goldwährung im Scheitern und der Einzug der Reichspapierwährung. München, 1875.

HENRI CERNUSCHI. La monnaie bimétallique, 1876.

——— M. Michel Chevalier et le bimétallisme, 1876.

——— Silver vindicated. London, 1876.

EMILE DE LAVELEYE. La monnaie bimétallique. Bruxelles, 1876.

S. DANA HORTON. Silver and Gold in their relation to the problem of resumption. With Appendix. Cincinnati, 1876. (The same, enlarged. 1877.)

GEO. M. WESTON. On the Silver Question. 1876.

GIBSON. The Silver Question. 1876.

THEODOR HERTZKA. Waehrung und Handel. Wien, 1876.

HORACE WHITE. The Silver Question. Chicago and New York, 1876.

VAN DER BERG. De Muntquestie. Batavia, 1876.

STEPHEN WILLIAMSON. Depreciation in the value of Silver. Liverpool, 1876.

——— India, in its relation to the Silver question. Liverpool, 1876.

SAMUEL SMITH, President of the Chamber of Commerce of Liverpool. Three letters on the Silver question. Liverpool, 1876.

LUDWIG COHNSTAEDT. Zur Silberfrage. Frankfurt a. M., 1876.

MENIER. L'unité de l'étalon monétaire. 12°.

JOHN P. JONES. Speeches in the Senate of the United States on the question of Gold and Silver. 1876.

LUDWIG BAMBERGER. Reichsgold. 3e éd. Berlin, 1876.

GUSTAVE DU PUYNODE. Les grandes crises financières de la France. Paris, 1876.

B. F. NOURSE. Currency and Prices. Boston, 1876.

SOCIÉTÉ NEERLANDAISE pour le progrès de l'industrie. Adresse à S. M. le Roi. Vrolik, Président, F. W. Van Eden, secrétaire. Harlem, July, 1876.

S. DANA HORTON. The Silver Bill in Congress. An Address to Congress against the Bland Bill, Dec., 1876. (Bankers' Magazine, Jan., 1877.)

R. M. HOLLINGSBURY. Selections from the Records of the Government of India, Financial Department, the Production of Gold and Silver, the Demand for Gold and the Price of Silver. Folio. Calcutta, 1876.

ERWIN NASSE. Die Demonetisation des Silbers und das Werthverhältniss der edlen Metalle. Berlin, Dec. 1876.

ERNEST SEYD. The fall in the price of Silver. London, 1876.

CHARLES MORAN. Money, Currencies, and Banking. New York.

AMASA WALKER. Our National Currency and the Money Problem. 1876.

W. G. SUMNER. A history of American Currency, etc. New York, 1876.

W. A. BERKEY. The Money Question. Grand Rapids, Mich., 1876.

A. ROMANELLI. Legislazioni e Coniazioni Monetarie. Roma, 1876.

GEORGE S. COE. Address to the American Bankers' Association. New York, 1876.

JOINT discussions between Gen. Thomas Ewing, of Ohio, and Gov. S. T. Woodford, of New York, on the Finance Question. Cincinnati, 1876.

J. S. MOORE. Letters on the Silver question, by The Parsee Merchant. New York, 1877.

OTTOMAR HAUPT. Gold, Silber, und Waehrung. 8°. Wien, 1877.

AUGUST EGGERS. Die Geldreform. 1877.

HENRI CERNUSCHI. Nomisma, or legal tender. 12°. New York, 1877.

THE SILVER question. American Social Science Association. Papers by Prof. W. Stanley Jevons and Benj. F. Nourse. Boston, 1877.

MURAT HALSTEAD. The Silver Question. Cincinnati, 1877.

E. DE PARIEU. Lettre à M. Washburne. (23 Février 1877.)

W. S. GROESBECK. Address before the American Bankers' Association, 1877.

WALCKER. Die Silber-Entwerthungs-Frage. Strasburg 1877.

PROJET d'une Banque Internationale à Bruxelles basée sur l'application du système de la monnaie banco ayant pour unité le kilogramme d'or ou d'argent fin. Bruxelles, 1877.

ROBERT NOXON TAPPAN. The Historical Succession of Monetary Metallic Standards. New York, 1877.

J. C. REDISH. The Silver Question, Read before the Literary and Philosophical Society of Liverpool, April 30, 1877.

FRANCIS J. WALKER. Money. 8vo. New York and London, 1877.

OTTOMAR HAUPT. Die Silberwährung. Wien, 1877.

S. COGNETTI DI MARTIIS. La questione monetaria. Mantova, 1877.

KAUTZ-GYALA. A Fémpénz-éz y Valutaügy a Torvinyhozás és a Tudomany jelen állása Szerint. Budapest, 1877.

STATISTIQUE internationale des mines et usines, publiée par le comité central de la statistique de Russie et rédigée par J. Bock. St.-Pétersbourg, 1877.

W. T. THORNTON, a Secretary of the Council for India. The Indian Side of the Silver Question. Four letters to Sir Louis Mallet. London, 1877.

W. VISSERING. On Chinese Currency, Coin, and Paper Money. Leiden, 1877.

H. R. LINDERMAN. Money and Legal Tender in the United States. New York, 1877.

WALTER BAGEHOT. On the depreciation of Silver. 1877.

W. L. FAWCETT. Gold and Debt. Chicago, 1877.

CORRESPONDENCE between Henry Hucks Gibbs, Esq., and Sir Louis Mallet, on the Silver question in its relation to India. London, 1877.

GEO. M. PARSONS. The Silver question. Columbus, 1877.

O. HAUPT. Gold- oder Silberwährung, ein Vorschlag zur Lösung der Valutafrage. Wien, 1877.

JOSEF MEYER. Ein Beitrag zur Valuta-Regulirung in Oesterreich-Ungarn. Wien, 1877.

JOH. PHILIP SCHNEIDER. Zur Währungsfrage. Eine Entgegnung auf das Buch des Hrn. Dr. Theodor Hertzka. Währung und Handel. Berlin, Carl Hald, 1877.

F. BIRNEISEL. Deutsche Münzreform und die Edelmetallbewegung während der Jahre 1871–1875. Würzburg, 1877.

HENRI CERNUSCHI. Le Bland Bill. Paris, 1878.

——— The same in English. London, 1878.

S. DANA HORTON. The Monetary Situation. An address before the American Social Science Association, with an appendix containing extracts from the following papers by the same author: The Prussian anti-silver theory, and its origin in an historical error. General restoration of Silver a condition precedent to successful cancellation of Paper Money. A vindication of the practicability of bi-metallic union. Cincinnati, May 21, 1878.

PROF. ERWIN NASSE. Der Bimetallismus und die Waehrungsfrage in den Vereinigten Staaten von Amerika, in von Holtzendorff und Brentano's Jahrbuch der deutschen Gesetzgebung und Volkswirthschaft. München, 1878.

C. FEER-HERZOG. Bericht an den Schweizerischen Handels- und Industrie-Verein über den gegenwaertigen Stand der Münzfrage. Zürich, Füssli und Co., 1878.

VICTOR BONNET. La Reprise de l'étalon d'argent aux Etats-Unis d'Amérique et le projet de Conférence Internationale. (Revue de Deux Mondes, Juin 1, 1878.)

E. DE PARIEU. L'unification monétaire devant l'Exposition universelle de 1878. (Journal des Economistes, Février 1878.)

——— La question de l'uniformité monétaire en 1878. (Correspondant, 1878.)

——— Discours au Sénat et interpellation adressée au Ministre des Finances. Mars 1878.

LE COMTE CHARLES RUSCONI. Question monétaire. Paris, 1878.

HENRI CERNUSCHI. La Diplomatie Monétaire en 1878. Paris, 1878.

A HANDBOOK on Gold and Silver, by an Indian Official. London, 1878.

DURBIN WARD. American Coinage and American Currency. An address. Cincinnati, 1878.

ROWLAND HAMILTON. Money and Value, etc., with an appendix on the Depreciation of Silver and Indian Currency. London, 1878.

GOLDMANN. Monetary Reform in Russia. Cracow, 1878.

H. D. BARROWS. The Money Paradox. Los Angeles.

DAVID A. WELLS. The Silver Question. New York, 1878.

G. M. WESTON. The Silver Question. New York, I. S. Homans, 1878.

A. J. WARNER. The Problem of Resumption Re-examined. 1878.

THOMAS M. NICHOL. Honest Money. An argument in favor of a redeemable currency. Chicago, 1878.

E. J. SCOTT. Suggestions concerning National Money. Toledo, 1878.

PANAIEFF. [Financial and Economic Questions.] Cracow, 1878.

The Silver Question. Memorial to Congress, January, 1878. New York.

HENRI CERNUSCHI. Les Projets Monétaires de M. Say. Paris, 1878.

H. V. POOR. Resumption and the Silver Question. New York, 1878.

WILLIAM BROWN. The Money Question in the United States. Montreal, 1878.

H. D. BARROWS. Silver and Greenbacks. Los Angeles, 1878.

A. LOUDON SNOWDEN. The Silver Dollar, etc. Philadelphia, 1878.

OTTO ARENDT. Die internationale Zahlungsbilanz Deutschlands in den letzten Jahrzehnten der Silberwährung. Berlin, 1878.

R. W. JONES. Money is Power. Saint Louis, 1878.

O. J. BROCH. Beretning om Kongressen i Paris, for Enhed it Moot, Vaegt og Mynt. Kristiania, 1878.

W. LEXIS. Die Edelmetalle im auswärtigen Handel Russlands. (Hildebrand's Jahrbücher, B. XXIX. Jena, 1878.)

L. BAMBERGER. Die Entthronung eines Weltherrschers. (Deutsche Rundschau, 1878.)

——— Das Gold der Zuknuft. *Ibid.*

JOHN SHERMAN, Secretary of the Treasury. Speeches and Reports on Financial Questions. Washington, 1879.

TH. MANNEQUIN. Le Problème Monétaire et la Distribution de la Richesse. Paris, 1879.

A. SOETBEER. Edelmetall-Produktion und Werthverhältniss zwischen Gold und Silber seit der Entdeckung Amerika's bis zur Gegenwart. Mit drei Tafeln graphischer Darstellungen. 4to. Gotha, 1879.

FRANCIS A. WALKER. Money and Trade. New York, 1879.

MONETARY UNION.

A LIST OF MONETARY TREATIES.

TREATIES FOR INTERCHANGEABLE CURRENCY.

In all cases where communities which have maintained an independent Coinage System have come into union with each other, or into subjection one to another, a conflict of Coinages must naturally ensue, and the settlement of such conflict must naturally offer analogies both with the jarring of the Money Systems of independent nations and with that monetary pacification which is the aim of international contract.

For instance, the monetary arrangements arising out of the consolidation of the Roman Empire, or, later, out of that of the royal power of France and that of the United Kingdom of Great Britain, must offer such analogies, while the partial and desultory coinage legislation of the Holy Roman Empire of the German Nation in past centuries, and in its turn the speedy monetary unification of the new German Empire of to-day, would offer similar points of resemblance and of instruction.

The following list is intended to include acts which bear a character more decidedly international; those of the German States which formerly formed part of the old German Empire standing distinct. In view of the novelty of the investigation, it is not improbable that the list is incomplete, if not indeed incorrect.

To guard against misunderstanding, an important distinction must be observed. The possible future monetary treaty of the chief Western powers, contemplated by the advocates of the policy adopted by the United States in the law of February 28, 1878, under which the Conference was convoked, differs in an essential point from treaties of which history offers an example. Such treaties have, it is believed, invariably had for their object a Fusion of Currencies or Mutuality of Legal Tender;

the Coins struck in one country were to receive legal currency in another; and this interchangeability of Coins was the main object of the treaty.

This general object may have implied the purpose, or carried with it the result, that a certain metal or certain metals should become or remain material of Coinage in the contracting countries, and may have included the obligation of each party to maintain by appropriate laws the Legal-Tender character of such coined metal.

But it was the coining and not the metal: it was the subdivision and the stamping of the material, and not the material itself, that offered the motive of the contract.

Until the middle of this century, it appears to have been taken for granted, perhaps unconsciously, but in any case by general consent, that the two metals would remain Money; that they would retain an international currency as material for Money sufficient to guarantee their general status. Gold might be excluded here from Legal-Tender, and there Silver might be ostracized, but there was no combined effort to exclude Silver, and the nations which would not admit Gold as Legal-Tender furthered its use as a trade Coin.

On the other hand, the advocates of the policy adopted by Congress dealt with the material, not with the stamping of its subdivisions.

The object of this policy would be fully met by a Treaty which should merely guarantee the equality of the metals before the law. Under such a Treaty the contracting parties might each retain undisturbed their national Coins; their mutual engagement would relate merely to the use of the two metals as full Legal-Tender at the same ratio. This implies of course that in making such Coins, uniform freedom should be granted to the private individual to have such metal coined and that the same charge, or absence of charge, for Coinage, should obtain in the contracting nations, and that at the same time full Legal-Tender power should be appropriately secured by each contracting country to its *own Coins* thus struck.

An examination of the History of the Coinage Confederations, hereafter mentioned, will reveal that their disadvantages or deficiencies arose either, 1st, from this extra-national legal currency of Coins, which was their primary object; or, 2d (when they contemplated the concurrent use of the two metals), from an extra-federal demand for Gold at a Silver price higher than that assigned to the metal in the federal Coinage System.

These disadvantages which inhered in all European Monetary Unions actually formed are believed to be excluded from that which the United States has proposed to the nations for discussion. It is not essential, nor is it an important practical object of this policy that extra-national legal currency of Coins should be included in the contract, while the union contemplated is so large that, so far as probabilities can be calculated, its tranquillity could not, under any circumstances which this generation is warranted in anticipating, be disturbed by an extra-federal demand for Gold.

LIST OF TREATIES.

GERMAN STATES.

Coinage Union of the Four Electors of the Rhine, fifteenth century.

Coinage and Customs Union of the same, seventeenth century.

Coinage "Correspondenz" of the various Districts of the Empire, sixteenth, seventeenth, and eighteenth centuries.

Coinage Agreement (*Recess*) of Zinna, 1667; Electors of Saxony; Electors of Brandenburg; joined by the House of Brunswick-Lüneburg.

Coinage Union of Leipzig, 1690; Elector of Saxony; Elector of Brandenburg; House of Brunswick-Lüneburg.

Coinage Treaty of Vienna, September 21, 1753; Austria; Elector of Bavaria.

Coinage-Union-Treaties of Frankfort, February 22, 1765, and of Worms, January 19, 1766, of the Electors of Mainz, Treves, and the Palatinate Landgrave of Hesse-Darmstadt, and Free-City Frankfort.

In some of the various treaties which established and regulated the GERMAN TRADE AND CUSTOMS UNION are to be found provisions affecting the reciprocal acceptance of coins.

COINAGE TREATY OF MUNICH, August 25, 1837. (Bavaria, Würtemberg, Baden, Hesse, Nassau, and Frankfort.)

COINAGE TREATY OF DRESDEN, July 30, 1838. (States of the German Customs Union.)

COINAGE TREATY OF MUNICH, March 27, 1845.

MONETARY CARTEL: for punishment of all crimes against the prerogative of coining and of issuing paper money. Karlsruhe, October 21, 1845. (Prussian Customs-Union); Prussian Customs-Union, February 19, 1853.

COINAGE TREATY OF VIENNA, January 24, 1857. (Formed in pursuance to Art. 9 of the Treaty of Karlsruhe, July 19, 1853, by Austria, the Principality of Lichtenstein, and the States which were parties to the Treaty of Dresden, July 30, 1838.) Austria, Prussia, Bavaria, Saxony, Hanover, Würtemberg, Baden, Electorate of Hesse, Grand Duchy of Hesse, Grand Duchy of Saxony, Oldenburg, Saxe-Meiningen, Saxe-Coburg and Gotha, Saxe Altenburg, Brunswick, Nassau, Anhalt-Dessau-Köthen, Anhalt-Bernburg, Schwarzburg-Sondershausen, Schwartzburg-Rudolstadt, Lichtenstein, Waldeck and Pyrmont, Reuss older line, Reuss younger line, Schaumburg-Lippe, Lippe, Landgraviate of Hesse, The Free City of Frankfort.

THE LATIN UNION.

MONETARY TREATY OF PARIS, December 23, 1865. France, Belgium, Switzerland, and Italy. Took effect August 1, 1866. Ratified, by Italy, June 2, and July 21, 1866; by Belgium, July 21, 1866; by Switzerland, 1866; and by France.

The Accession of Greece to the Treaty took place April 10–22, 1867; of Roumania, April 14, 1867; of the States of the Church, June 18, 1866.

Supplementary Treaty of January 30, 1874. Belgium, France, Italy, Switzerland.

Supplementary Declaration of February 5, 1875.

Supplementary Declaration of February 3, 1876.

Supplementary Declaration, 1877.

Treaty of the Renewal of the Treaty of 1865, November 5, 1878.

FRANCE AND AUSTRIA.

PRELIMINARY MONETARY TREATY OF PARIS, July 3, 1867. France and Austria.

THE SCANDINAVIAN UNION.

MONETARY TREATY OF DECEMBER 18, 1872. Sweden and Denmark.

Supplementary Treaty of May 27, 1873.

Treaty of Accession of Norway, to the latter Treaty, October 16, 1875.

THE ORIGIN OF THE MONETARY UNION CALLED "LATIN," 1865.

[Translation.]

REPORT ADDRESSED TO HIS MAJESTY THE EMPEROR BY HIS EXCELLENCY THE MINISTER OF FINANCE, CONCERNING A BILL RELATING TO THE MONETARY TREATY NEGOTIATED BETWEEN FRANCE, BELGIUM, ITALY, AND SWITZERLAND.

(Second Exhibit to No. 2375. Distribution of 14th April, 1866—Council of State, Sections of Finance and of Legislation consolidated, No. 76333. M. de Lavenay, Counsellor of State, Reporter.)

SIRE:

The attention of Your Majesty has been now for some time directed to that economic movement which is substituting Gold for Silver in the monetary system of the entire world.

For ages, the yield of Silver has been greater in value than that of gold, and this movement of production favored the maintenance of the relation of 1 to 15½ established between the respective values of the two Precious Metals in the French monetary system.

Since 1846 the proportion between the values of the quantities of the two metals annually extracted from the mines has been reversed; the yield of gold has become greater than that of silver, and it has constantly, although in varying degree, preserved this superiority.

These great quantities of gold, coming, for the most part, from California and Australia, have thus rendered this metal far more abundant in the issues of coin in all the countries which admitted it, either as principal money, as, for example, England, Portugal, Brazil, the city of Bremen, or as money concurrently with silver, as did France and Italy.

The abundance of gold has even caused the introduction of this

metal into the monetary system of countries which lately rejected it, as, for example, Switzerland, Belgium, and English India.

In France all large payments which, as is well known, were formerly made in sacks of 5-franc pieces, have been of late years effected in gold; and of the old 5-franc dollars almost all have been successively exported or melted down; to be replaced by coins of gold, which metal being comparatively depreciated, must, upon its exchange with Silver, give a sure profit to speculation.

Your Government, Sire, taking this course of facts into consideration, has adopted various measures in view of this situation. It has notably favored the diffusion of gold in a form convenient for the replacing of the 5-franc pieces which were disappearing; and when the exportation of Silver extended to the pieces of two francs and less, it was sensibly affected by this condition of affairs and consulted various commissions successively on the means of remedying the embarrassment to business which resulted from it.

After some hesitation these commissions called the attention of the Government to the method heretofore adopted by various states to preserve Silver in circulation concurrently with gold.

This method consists in establishing between coined gold and coined Silver, a divergence of value less considerable than that which is the result of their commercial value: Silver thus artificially appreciated is issued under the form of change, the legal tender of which is so limited as not to enable it to replace either gold or the silver coins of higher grade, in large payments.

The system of silver change, with limited legal tender, and with a proportion of alloy sufficient to prevent its being exported at a profit, has been in use for half a century in England with great success, and it has more lately been extended to the United States, Portugal, Switzerland, and Italy.

Your Government has regarded it as its duty to accept the counsels thus expressed to it, and which were supported by the facts of experience; in 1864 it proposed to the Legislative Body the application of this new system in France, in asking that silver coins of 2 francs, 1 franc, 50 centimes and 20 centimes, be struck at the fineness of 835 thousandths instead of the fineness of 900 thousandths which has been ordained by the Law of 7 Germinal Year XI. The proposition as presented was accompanied by all the precautions, the limit of Legal Tender, the eventual redemption by the State, which would be of a nature to reassure the public.

The Legislative Body, through motives of circumspection which can be easily understood, adopted only the principle of the project which was submitted to it, and proposed, and their proposition was accepted by your Government, to restrict its application to Silver coins of the smaller denominations. The Law of May 25, 1864, authorized the coinage, up to the amount of 30 millions, of fractional coins of 50 and 20 centimes of

the fineness of 835 thousandths. This sum is extremely small compared with the whole population of France as it represents less than a franc *per capita;* and every one knows how much the amount of change necessary for daily use rises above this figure, without speaking of the exceptional needs of factories which have to pay wages to a large number of workmen every day.

The Committee of the Legislative Body accordingly, well understood that a more complete measure would later become necessary, and it is to this effect that its honorable reporter expressed himself in his report on the bill, in saying that the amount of the new fractional coin might, if this state of affairs continued, be *augmented with greater security when this coin should already have been accepted by the public.*

On the other hand at the time of the discussion of this law an honorable deputy having criticised the timidity of the project, and especially the restriction of its operation to 50 centime pieces, the Vice-President of the Council of State and Commissioner of the Government, Mr. De Parieu put forth the view, which had been already expressed in the name of the Government to the Committee of the Legislative Body, that the law in its restricted terms might in fact be incomplete, and that in presence of a measure *which was perhaps temporary,* the Government must make formal reservations concerning its course in the future. In point of fact, the Government, while acquiring certainty that the new coin at the fineness of 835 thousandths, had been favorably received by the public, was at the same time enabled to ascertain that this coin by the clearness of its imprint brought into stronger light the unfortunate condition of the older issues of one and two francs which had been degraded by wear and not unfrequently deprived of that imprint which gave them their character as money.

On the other hand, the experience, which has been perseveringly undergone for ten years past has shown that these fractional coins cannot be renewed without the direct intervention of the state, which must, at its own expense, and by various combinations, provide for their fabrication, while formerly this could be left to the needs and to the action of private individuals; and after the renewals which have been thus made, not without an effort since 1856, this same experience unequivocally establishes the impossibility of keeping the new coins in circulation.

These issues of new Silver Coin, said the honorable Mr. Gouin, in his report of April 28, 1864 *were almost immediately absorbed by speculators.*

For a moment, it is true, in 1865, the Directory of the Mint indulged in the hope of seeing Silver reappear under its presses: 362,000 francs were coined at 900 thousandths fine, from ingots of Silver brought to the mint by the trade. But this accidental reinforcement which was absolutely insignificant in comparison with the amount struck in our mints before 1850, which habitually exceeded 100 millions worth of Silver annually, had no effective result: and this fact also proves that the reappearance of Silver *en masse* in our monetary workshops although so often announced has never yet been realized.

Can this state of affairs be remedied, and can the needs of the future be met by a great increase of Coinage of 50 and 20 centime pieces? Your Government is not of opinion that this is possible. It is evident that the small change which is needed for the gold 10 franc piece, or even for the gold 5 franc piece, cannot be exclusively composed of 50 and 20 centime pieces, without such a multiplication of these coins, themselves not easy to handle, as would cause inconvenience in payments.

The regulations of the Mint were imspired by the actual needs of trade when they ordained in 1854 that in a million of francs worth of Silver to be coined, 950,000 francs should be struck in 5 franc pieces, and 50,000 in pieces of 2 francs and under, as follows:

			f.	c.
10,000 francs	in pieces of		2	
25,000 "	"		1	
12,500 "	"			50
2,500 "	"			20

The 50 and 20 centime pieces have thus been considered as entitled to form 30 per cent of the small change of the country and it would be impossible to make them the principal basis of that circulation without inconvenience to the public.

Your Government, Sire, has therefore been led by the favor with which the new fractional coins have met, to give its adhesion to the idea which has of late inspired certain legislatures and notably those of the Swiss Confederation and of the Kingdom of Italy; which have established, by the side of the normal standard, subjected to the chances of exportation and of return to the market, a species of small change coined at a diminished fineness and thus preserved from exportation, a species of money comprising all the fractional parts of the dollar of five francs, under its double form of dominant coin in the Silver Standard and of coin of lowest denomination in the Gold Standard.

The consequences of this system have been, so to speak, hastened by international influences worthy of consideration. The System which has established Silver change of diminished fineness in Switzerland, in Italy, and in France has shown in its course no uniformity, no harmony. While Italy and France adopted the fineness of 835 thousandths Switzerland chose a fineness of only 800 thousandths. It was to be feared that the Swiss Coins, introducing themselves into circulation by way of our eastern frontier, and becoming rare through the exportation of the pieces of 900 thousandths in fineness should usurp a great part of the place belonging to our national coin.

On April 14, 1864 a circular order from my department prohibited the admission of the Swiss coins in our public offices of receipts. These coins were in fact penetrating into the circulation and were giving rise to dispute, and to doubt in transactions between private persons.

Upon this, Belgium, whose monetary system is intimately connected with that of France Switzerland and Italy, having on its own account

instituted an examination into the question of the reduction of the fineness of its fractional Silver coin, apprehended the importance of making its action conform with that of neighboring States, and made known its view as to the utility of a Treaty between the four States whose monetary system rests on numeration by francs.

Struck by the opportuneness of this idea, which was discussed in various diplomatic communications I expressed to my colleague the Minister of Foreign Affairs the opinion that it would be well to bring together in Paris delegates of the four states who should be charged with the task of satisfying the requirements of commerce by a community of money, which had been disturbed by recent events, although in states which had long been, in fact, united.

In pursuance of this action on my part, and through the good offices of the Department of Foreign Affairs, a Conference of delegates of the four States interested was opened in Paris the 20th of last November, under the Presidency of Mr. de Parieu the Vice President of the Council of State. *

Enlightened by the discussion the Swiss Government has consented to raise its system of coinage to the proportion already sanctioned by the legislations of France and of Italy. The amount of change to be issued has been fixed *at a maximum* for the different States, according to the number of the population and in conformity with the results of experience. Various mutual concessions have permitted the formation of a veritable Monetary Union in reference to gold and Silver coin, and the Treaty defining these arrangements was signed at Paris by Commissioners Plenipotentiary on the 23d of December, 1865. It has already been ratified by the Swiss Federal Assembly in the course of the last month.

Many of the dispositions of this treaty remain entirely within the free exercise of the prerogative of Your Majesty in relation to diplomatic agreement, and notably in relation to treaties of commerce.

Thus the uniform regulation of the coinage of Gold pieces, and of Silver 5-franc pieces, which was maintained in spite of the desire expressed by the delegates of the Belgian, Italian, and Swiss Governments, that in the new Monetary Union the principle of the Gold Standard should exclusively prevail, and, again, the obligation of accepting in public offices of receipt of each State, under fixed conditions, Coins struck in the other contracting States, did not appear in any respect to exceed the constitutional powers of Your Majesty in matters of diplomatic agreement; these stipulations chiefly affect the relations of international commerce. The same cannot be said of the articles of the treaty

* The members of this Conference were:

For France: Messrs. De Parieu and Pelouze, delegates of the ministry of Finance; Herbet, delegate of the Ministry of Foreign Affairs; Julien, delegate of the Ministry of Agriculture, Commerce, and Public Works.

For Belgium: Messrs. Fortamps and Kreglinger.

For Italy: Messrs. Artom and Pratolongo.

For Switerland: Messrs. Kern and Fer-Herzog.

which concern the fabrication of 2-franc and 1-franc pieces under conditions analogous to those which have already been adopted for pieces of 50 centimes and 20 centimes. The effect of the treaty of December 23 being to react, in this regard, upon the interior organization of the French Monetary System, in terms almost identical with those of a bill presented to the legislative body by your Government on the 6th of April, 1864, Your Majesty has thought proper to associate the Legislative Body in the examination of the articles of the treaty of December 23, 1865, which relate to the establishment of the new divisional Silver Coin. Your Majesty has believed that the Legislative Body would be conducted by an attentive study of the interests at stake in this question, to give force of law to these articles, and would hasten to add the sanction of its authority to an international enactment which may bring important advantages in the commercial communications of more than 66 million souls, which, in spite of the diversity of language and of nationality, are united under a monetary system whose name and origin remain French; an international enactment the announcement of which has been received with favor by public opinion. I have, in consequence, the honor of proposing to Your Majesty that the following bill be remanded to the examination of the Council of State (united sections of Legislation, Justice, Foreign Affairs, and Finance).

SINGLE ARTICLE.

The provisions of the fourth, fifth, sixth, and ninth articles of the Monetary Treaty signed at Paris December 23, 1865, between the Commissioners Plenipotentiaries of France, Belgium, Italy, and Switzerland, which conflict with the law of 7 Germinal year XI, shall have the force of law.

I am, with respect,

SIRE,

Your Majesty's very humble and devoted subject,

(Signed) ACHILLE FOULD.

THE TREATY CONSTITUTING THE LATIN UNION.

MONETARY TREATY CONCLUDED DECEMBER 23, 1865, BETWEEN FRANCE, BELGIUM, ITALY, AND SWITZERLAND.

His Majesty the Emperor of the French, His Majesty the King of the Belgians, His Majesty the King of Italy, and the Swiss Confederation, equally animated by the desire to effect a more perfect harmony in their Monetary legislation, and to remedy the inconvenience to trade between their respective countries resulting from the diversity of their small Silver Coins, and to contribute to the uniformity of weights, measures, and Coins by forming a Monetary union, have therefore resolved to conclude a convention for that purpose, and have named their commissioners plenipotentiary, as follows:

For FRANCE: M. Marie Louis Pierre Felix Esquirou de Parieu and M. Theophile Jules Pelouze.

For BELGIUM: M. Frederic Fortamps and M. A. Kreglinger.

For ITALY: M. Isaac Artom and M. Valentin Pratolongo.

For SWITZERLAND: M. Kern, minister plenipotentiary, &c., and M. Feer Herzog, member of Swiss National Council.

These commissioners, having interchanged their respective credentials, agreed upon the following articles:

ARTICLE 1. Belgium, France, Italy, and Switzerland unite to regulate the weight, title, form, and circulation of their Gold and Silver Coins. No change is made for the present, in legislation, relative to copper Coins for the four countries.

ART. 2. The high contracting parties bind themselves not to coin, or permit to be coined, any gold other than in pieces of 100, 50, 20, 10, and 5 francs in weight, standard, tolerance, and diameter, as follows: All

these coins shall be of the fineness or standard of .900, with a tolerance of two thousandths above or below the legal standard. The tolerance in weight shall be for the 100 and for the 50 franc pieces, one thousandth above or below; for the 20 and 10 franc pieces, two thousandths; for the 5-franc pieces, three thousandths. The weights and diameters are these:

Gold Coins.—100 francs, weight 32.258.06 grams, diameter 35 millimetres; 50 francs, weight 16.129.03 grams, diameter 28 millimetres; 20 francs, weight 6.451.61 grams, diameter 21 millimetres; 10 francs, weight 3.225.80 grams, diameter 19 millimetres; 5 francs, weight 1.612.90 grams, diameter 17 millimetres.

The different states will receive all the above coins when not worn to one-half per cent. or the devices effaced.

ART. 3. The contracting governments bind themselves not to coin, or permit to be coined, silver pieces of 5 francs, except in the following weight, standard, tolerance, and diameter: The weight of each 5-franc piece shall be of twenty-five grams; its tolerance in weight, three thousandths; its fineness, .900; its tolerance in standard, two thousandths; and its diameter thirty-seven millimetres.

They will receive the above pieces at par, unless reduced one per cent. by wear, or the device is worn off.

ART. 4. The high contracting parties will coin hereafter pieces of 2 and 1 franc, 50 and 20 centimes, only under the following conditions of weight, standard, tolerance, and diameter, The fineness of these pieces shall be of .835; their tolerance of standard, three thousandths; their tolerance of weight, five thousandths for the first two, .007 for the 50-centime piece, and .010 for the 20-centime piece. Their weights and diameters as follows:

Silver Coins.—2 francs, weight 10 grams, diameter 27 millimetres; 1 franc, weight 5 grams, diameter 23 millimetres; 50 centimes, weight 2.50 grams, diameter 18 millimetres; 20 centimes, weight 1 gram, diameter 16 millimetres.

The above pieces shall be recoined by the respective governments when reduced by wear, or when their devices shall have become effaced.

ART. 5. Pieces of 2 and 1 franc and of 50 and 20 centimes of a different coinage from the above shall be withdrawn from circulation by the 1st of January, 1869. This term is extended for the pieces of 2 and 1 franc, issued in Switzerland by the law of January, 1860.

ART. 6. The silver coins authorized in article 4 shall be a legal tender between individuals of the states in which they are issued to the sum of fifty francs. The nation issuing them shall receive them in any amount.

ART. 7. The public banks of each of the four countries will receive the coins of article 4, to the sum of 100 francs, in payment to said banks. The governments of Belgium, France, and Italy will receive the Swiss 2 and 1 franc pieces of 1860, under the same conditions, as equivalent to the coins of article 4, and under the reservation relative to wear.

ART. 8. Each of the contracting governments binds itself to receive from banks or individuals the small coins they have issued, and return the equivalent in current coin, (gold or 5-franc silver pieces,) provided the sum presented be not less than 100 francs. This obligation shall extend two years beyond the expiration of this treaty.

ART. 9. The high contracting parties agree not to issue a greater amount of these 2 and 1 franc, 50 and 20 centime pieces of article 4, than 6 francs for each inhabitant. The amount thus fixed in accordance with the last census and the presumed increase of population is fixed at—

	Francs.
For Belgium	32,000,000
For France	239,000,000
For Italy	141,000 000
For Switzerland	17,000,000

Exclusive of the above sums, the different governments can issue of coins already in circulation in the following proportions: France, in 50 and 20 centime pieces, by the law of the 25th May, 1864, about 16,000,000; Italy, in 2 and 1 franc, 50 and 20 centime pieces, by the law of the 24th August, 1862, about 100,000,000; Switzerland, in 2 and 1 franc pieces, by the law of 31st January, 1860, about 10,500,000.

ART. 10. Hereafter the year of issue shall be stamped on all the gold and silver coins issued by the four governments.

ART. 11. The contracting governments shall annually state the quantity of their issue of gold and silver coins, and the amount collected for melting. They shall likewise give notice of important facts in regard to the reciprocal circulation of their issues.

ART. 12. Any other nation can join the present convention by accepting its obligations and adopting the monetary system of the Union in regard to gold and silver coins.

ART. 13. The execution of the reciprocal engagements contained in the present convention is left to the high contracting powers, who bind themselves to pass laws for the purpose as soon as possible.

ART. 14. The present convention shall remain in force till the 1st of January, 1880. If it be not repealed a year before the expiration of that term, it shall remain in force for an additional period of fifteen years, and so on until repealed.

ART. 15. The present convention shall be ratified, and the ratifications exchanged at Paris, within six months, or less time, if possible.*

* For a notice of the supplementary declarations and treaties of the Latin Union see pages 734, 735.

EXTRACT FROM THE REPORT OF THE COMMITTEE ON COINAGE, WEIGHTS, AND MEASURES OF MAY 17, 1866, BY HON. JOHN A. KASSON.

(Report 62, Thirty-ninth Congress, First Session.)

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COINAGE.

In respect to the gold and silver coins of the United States no specific change can, with propriety, be recommended for immediate adoption.

The United States early established (July 6, 1785) the decimal system in its application to money, and as a consequence of it, have now a simple, convenient, and admirable measure of values. It only remains to be considered how a common standard of international values, for the use of all civilized and commercial nations, may be most conveniently established.

In this connexion three questions arise:

First. Should a unit entirely new be established? or,

Second. Should the established unit of some one nation now in use be adopted by all other nations?

Third. If so, which possesses the greatest advantages?

The advantage of the decimal system is now universally conceded among commercial nations. No country is more ready to concede its superiority than England, which has hitherto failed to adopt it. It is understood that the Bank of England, and some of her great railroad corporations have been compelled to adopt the decimal system in the keeping of accounts. The government has also created a new coin in order to obtain the tenth of a pound.

The objections to the creation of an entirely new unit of value are evidently irresistible, if any existing unit in national use meets the conditions of convenience as a common standard, and of decimal computation; for the people of all nations will be subject to the inconvenience of the adoption of the wholly new system, while the adoption of a decimal system now in use in any one or more nations would relieve at least a portion of the people from the inconveniences attending the change, and would find the people of all nations at least partially acquainted with it at the beginning. This fact, itself, should justify some sacrifice of national *amour propre* for the general good.

In 1856 (August 15) Congress by a joint resolution directed the Secretary of the Treasury to appoint a commissioner to confer with the proper functionaries in Great Britain in relation to some plan of so mutually arranging, on a decimal basis, the coinage of the two countries, that the respective units should be thereafter easily and exactly commensurable. The Committee on Finance in the Senate, in reporting the resolution, remark that no measure can be readily suggested whose realization would mark a more decided epoch in the history of commerce. Under this resolution a very competent gentleman was appointed the commissioner, and on the 6th of January, 1859, his report was communicated to Congress. (Ex. Doc. H. R. No. 36.) Although the British government were not prepared themselves to take the initiative with reference to a project which could not be carried out by it without parliamentary sanction, they were prepared to consider and confer with respect to any proposal that the commissioner might be instructed to make in behalf of the government of the United States.

This result was merely preliminary, but perhaps all that could have been attained under the limited instructions given to the commissioner. But this beginning was not followed up, and there seems to have been no further prosecution of the negotiations.

In his annual report to Congress in December, 1862, the very able Secretary of the Treasury, (now Chief Justice of the United States,) invited the attention of Congress to the present favorable occasion for securing harmony between our own coinage and that of Great Britain. He said:

"In his last report, the Secretary took occasion to invite the attention of Congress to the importance of uniform weights, measures, and coins, and to the worth of the decimal system in the commerce of the world. He now ventures to suggest that the present demonetization of Gold may well be availed of for the purpose of taking one considerable step towards these great ends. If the half eagle of the Union be made of equal weight and fineness with the gold sovereign of Great Britain, no sensible injury could possibly arise from the change; while, on the resumption of specie payments, its great advantage would be felt in the equalization of exchange and the convenience of commerce. This act of the United States, moreover, might be followed by the adoption by Great Britain of the federal decimal divisions of the coin, and thus a most

important advance might be secured towards an international coinage with values decimally expressed."

At the international congress of Berlin, the transactions of which were reported by the United States commissioner, and submitted to Congress, it was resolved as follows:

"First. That the congress recommends that the existing units of money be reduced to a small number; that each unit should be, as far as possible, decimally subdivided; that the coins in use should all be expressed in weights of the metrical system, and should all be of the same degree of fineness, viz: nine-tenths fine and one-tenth alloy.

"Second. That the different governments be invited to send to a special congress delegates authorized to consider and report what should be the relative weights in the metrical system of gold and silver coins, and to arrange the details by which the monetary system of different countries may be fixed according to the terms of the preceding propositions."

The occasion of the World's Exposition of Industry at Paris in 1867 will furnish the proper opportunity for a free conference between the authorized commissioners of different governments as to the best means of establishing a uniform system of coinage for the common use of the nations of the world. It is to be hoped that the government of the United States will be represented by a commissioner whom it may be authorized to delegate, with special reference to the accomplishment of this great object.

The only interest of any nation that could possibly be injuriously affected by the establishment of this uniformity is that of the money-changers—an interest which contributes little to the public welfare, while, by diversity of coinage and of values, it adds largely to its private accumulations.

The only indispensable condition of this uniformity of value is that in the standard unit, with its divisions and multiples used in commerce, there shall be in all countries an equal amount of gold (or silver) with fixed proportion of alloy. Each nation will retain its own devices and legends, and other national peculiarities of mintage. A common name for the standard unit would be desirable, but not essential. The presence of a given amount of precious metal, mixed with a given amount of alloy, is the only absolute prerequisite for the establishment of international uniformity in coinage. The dollar of the United States, four shillings of England, and five francs of France are of approximate value. Several nations of Europe have adopted, under other names, the coinage of France, making it of equal value. The general par value of shares in railroad and other corporations on the continent of Europe, as well as in England and the United States, is one hundred dollars or its approximate equivalent in the money of the different nations. This, of itself, would seem to be a concession of the value which

should constitute the standard unit of money. The United States are now in a favorable condition to yield, with little inconvenience, to a variation in the essential value of their dollar, if it should become necessary, their coin being now withdrawn from general circulation. No opportunity so auspicious for effecting any needed change in quantity of gold or silver and alloy can be expected for many years to come. The present would, therefore, seem to be the most desirable period for this government to engage in the preliminary negotiations necessary for the establishment of a common unit of value among all commercial nations. But the committee can make no recommendation of any specific measure beyond the resolution herewith submitted. Their conviction is clear that international uniformity is of the utmost importance for the convenience of our external trade and of our general intercourse with foreign nations; and that at this time, especially, it is the duty of the government to prosecute with energy its efforts to effect an agreement with the leading nations of Europe on this subject. The consent of the United States, of England and of France, would necessarily ultimate in the consent of all commercial nations.

* * * * * * * *

[The following resolution passed the House of Representatives, but was delayed in the Senate, and finally action upon it was abandoned in view of the proceedings with reference to the Exhibition and to the Conference of 1867.]

JOINT RESOLUTION to authorize the President to appoint a special commissioner to facilitate the adoption of an uniform coinage between the United States and foreign countries.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the President be, and he is hereby, authorized to appoint a special commissioner to negotiate with foreign governments for the establishment of the common unit of money, of identical value in all commercial countries adopting the same; that all governments with which the United States hold diplomatic relations be invited to participate in the negotiations. That any plan which may be agreed upon by part of or all the representatives engaging in such negotiations be submitted to Congress for its approval before being carried into effect in the United States, and that the compensation allowed to such commissioner be the amount necessary for his actual and proper expenses incurred in the execution of his duties.

THE INVITATIONS OF FRANCE TO THE UNITED STATES TO ACCEDE TO THE LATIN UNION AND TO TAKE PART IN THE CONFERENCE OF 1867.

Mr. Berthemy to Mr. Seward.

[Translation.]

LEGATION OF FRANCE AT WASHINGTON,
Washington, January 4, 1867.

SIR: I have the honor to transmit herewith to your excellency a copy of the text of the monetary convention, concluded December 23, 1865, between France, Belgium, Italy, and Switzerland.

As you will see, Mr. Secretary of State, this act, which went into force the 1st August last, reconstituted, under the guarantee of an international contract, a monetary union which had existed in fact between these four states, but which diverse measures, adopted without preliminary understanding, had broken up during late years. These measures, adopted successively in Switzerland, in Italy, and in France, had a sole object, that of putting an end to the abnormal disappearance of fractional silver money, or standard change money, indispensable for payments of trifling amounts. To the same evil they opposed the same remedy, the lowering of the standard, but according to different rules and proportions. The Swiss pieces, for instance, coined at the standard of eight hundred thousandths fine, while those of France and of Italy were at the standard of eight hundred and thirty-five, had to be refused in the public treasuries of the empire, as well as in those of the kingdom of Italy. The inconvenience of this state of things was not long in becoming apparent, and causing, perhaps, more keenly than in past

time, the appreciation by the populations of the four bordering states of the advantages of the monetary communion by which they had been formerly benefited. For the purpose of satisfying the just claims and pressing interests of trade, the government of the Emperor last year proposed to Belgium, to Italy, and to Switzerland to intrust to a mixed international commission the care of re-establishing the ancient uniformity by taking account of facts accomplished, and of the new conditions of the monetary circulation of Europe. Commissioners appointed by these different states assembled at Paris under the presidency of M. de Parieu, vice-president of the council of state, and, in stating the causes for the convention of the 23d December last, they have fully met the immediate end which was assigned for their labors, according to the expression used by the minister of finance of Belgium, on submitting to the Belgian chamber the project of law intended to sanction the convention: "This act contains in effect, within itself, saving the unity of stamp, a monetary system, complete for moneys (coin), properly so called, to the exclusion of *billon* (base coin)."

At this time the gold and silver coinage of these four states is conducted under conditions that are identical. In what relates especially to fractional silver of the piece of five francs for real change of standard money, which alone can meet the demand for small transactions, the standard of eight hundred and thirty-five thousandths has been definitively adopted; this is the figure which, already adopted in France and in Italy, has seemed best to satisfy the conditions of the problem which was in discussion for a solution—that is to say, to give to fractional metallic coins of the union the highest intrinsic value and the qualities of a good alloy, at the same time doing away the premium they had reached from the relative depreciation of gold, which allowed speculation to melt them up and export them at a profit.

Express provisions limit, moreover, the emission of this legal small change, and serve also as the corrective of the lowering of the standard value. Precise rules reduce to the smallest possible figures the allowances for cost of fabrication, so as to maintain the money of the union in a constant normal condition. In fine, you will remark, Mr. Secretary of State, a clause which is detached from the rest of the stipulations, exclusively destined to determine the monetary regulations of the four countries. I desire to say something of the accession which article twelve guarantees to any other state. This clause may be considered as the manifestation of a wish that sprung up in the proceedings of the international conference, and has not been without influence on the happy issue of the negotiations. After having brought about the disappearance of divergencies of which they recognized the inconveniences, the delegates of France, of Belgium, of Italy, and of Switzerland, seeing a population of seventy millions of souls thenceforth endowed with the same monetary system, must quite naturally have been led to fix attention on an interest more general. Without entering on the examination

of a question which it was not their mission to solve, they expressed in the name of their governments the desire to see the union, as yet restricted to four countries, become the germ of a union more extended, and of the establishment of a general monetary circulation among all civilized states.

The government of the Emperor would be very happy to see this proposition well received, but, at the same time, cannot dissemble the difficulties and objections it might encounter. But it doubts not, at least, that the views which are thus inspired correspond with necessities which henceforth must press upon the solicitude of governments. In proportion as the solidarity which now exists between economic interests becomes more and more close, each nation, in view of advantages already realized, better understands the importance of removing the obstructions still met with in international relations, one of the most onerous and annoying results assuredly, from the diversity of coinage which multiply the fluctuations of exchange. The idea of the unification of the monetary systems makes, then, every day fresh progress. It is under its influence that, since the 24th January, 1857, there has been concluded the treaty which has markedly simplified the monetary régime of the States comprised in the ancient Germanic confederation; and more recently, in 1865, the same tendency has manifested itself in the discussions and in the votes of the German commercial diet; in fine, the convention, even of the 23d December, has been spontaneously the object on the part of several foreign governments of an investigation which bears sufficient evidence of their solicitude about the interests which attach to it. A new monetary law has already introduced in the Roman States the régime stipulated by the convention of Paris; and, in the United States, public opinion has been called to this question even in the deliberations of Congress.

If, for the moment, objections too weighty prevent the federal government from adhesion to the convention of 23d December, the government of the Emperor would not the less attach special value to being informed of these obstacles, and to learn what observations may have been drawn forth by the examination of that international act. In the absence of more immediate results, there would be incontestable advantage in being enabled to appreciate exactly the nature and extent of the difficulties that must be thought of removing, in order to arrive at monetary uniformity; and from the moment it is allowable to look toward the practical solution of such a problem, it becomes the duty of governments to follow it up, without exclusive ideas, mutually enlightening each other in their researches. Thus, also, in case the federal government, without wishing to accede to the union actually constituted, should be disposed, either to enter into arrangements destined to establish equations between some of its monetary types of gold or silver, and those which the convention may determine, or to take part in an international conference at which might be discussed the means of arriving at a more

extended monetary understanding, the government of the Emperor will entertain with readiness the overtures which might be addressed to it in this view.

Accept, Mr. Secretary of State, the assurances of my very high consideration.

BERTHEMY.

Hon. WILLIAM H. SEWARD.

Mr. Seward to Mr. Berthemy.

DEPARTMENT OF STATE,
Washington, February 13, 1867.

SIR: I have the honor to acknowledge the receipt of your communication of the 4th ultimo, transmitting a copy of the text of a monetary convention concluded on the 23d of December, 1865, between France, Belgium, Italy, and Switzerland, the origin and purpose of which your note lucidly explains, and which by its terms is open to the adhesion of other governments.

Your note indicates a wish on the part of the imperial government, in the event of the United States not being prepared to subscribe to the stipulations of the convention, to be made acquainted with the obstacles in the way of such an arrangement; and you most courteously suggest that if this government, even though not able to accede to the conventional union actually constituted, should be disposed either to agree upon stipulations destined to establish equations between some of its monetary types of gold or silver and those which the convention may determine, or to take part in an international conference at which might be discussed the means of arriving at a more extended monetary understanding, the government of the Emperor will entertain any overtures which might be addressed to it with this view.

Having consulted the Secretary of the Treasury upon the subject, I have the honor to state, in reply to your note, that this government, both in its legislative and executive departments, has repeatedly manifested its interest in the question of international unification of monetary standards; that the importance of a standard unit of equal value in all commercial countries for the uses of account and currency is fully recognized and appreciated; and that the ideal object presented in your communication being acceptable, it only remains to be decided how the desired result may be brought about.

It is to be hoped that neither the quadripartite convention, nor the proceedings already adopted by the four governments under its provisions, will be held to preclude any of those governments from entertaining considerations in favor of its modification which may be offered by other governments in the interests of a system universally acceptable.

From the enclosed reports you will be able to form an idea of the prog-

ress of the investigation of this question by this government, and of its views as to the manner in which the discussion of it should be continued. Both branches thereof have concurred in providing the agencies for this purpose, in connection with the Universal Exposition to be opened at Paris in April next, on which occasion it is presumed that leading nations, not parties to the convention before noticed, will be represented, with authority vested in their delegates or commissioners to consider and report upon this question with those of the four powers. This government, however, has no hesitation in avowing its desire to come into accord with other governments with which the United States hold important relations, to attain the object proposed, and to encourage a spirit of conciliation in face of the conflicting interests and inconveniences involved in its accomplishment.

I beg that you will accept, sir, a renewed assurance of my highest consideration.

WILLIAM H. SEWARD.

M. BERTHEMY, *&c., &c., &c.*

The documents enclosed with the above were: the report of the Hon. John Kasson, from the Committee on Coinage, Weights and Measures, of the House of Representatives (Report No. 62, Thirty-ninth Congress, first session); the report of the Director of the Mint of the United States for the fiscal year ending June 30, 1866; and President's message and documents (Senate Ex. Doc. No. 5, Thirty-ninth Congress, second session), relating to the collection of products, and of weights, measures, and coins for the Paris Universal Exhibition of 1867.

Mr. Berthemy to Mr. Seward.

[Translation.]

LEGATION OF FRANCE TO THE UNITED STATES,
Washington, May 27, 1867.

Mr. SECRETARY OF STATE: On communicating to you, under date of 4th January last, the text of the monetary convention recently concluded between France, Belgium, Italy and Switzerland, I had, at the same time, the honor to call your attention to the opportunity for submitting to an international conference which should be held at Paris the study of the more general question of uniformity of coinage.

In view of the reception given to these overtures, as well by the cabinet of the United States as by those of other countries to which they were addressed, the government of the Emperor has thought that the time has arrived for following out the project, the realization of which it was their aim to prepare. In consequence, a formal proposition has been transmitted through the diplomatic medium to divers governments in order that they might cause themselves to be represented in a commission which should meet at Paris on Monday, the 17th June next, at

the hotel of the department for foreign affairs. This conference would be presided over conjointly by the minister for foreign affairs and the minister of finance. The vice-presidency would be devolved on Mr. de Parieu, vice-president of the council of state, who, with Mr. Herbet, minister plenipotentiary, director of consulates and commercial affairs, would thereat represent the department for foreign affairs. The delegates from the department of finance would be Mr. Pelouze, member of the institute, president of the commission on coinage, and Mr. de Lavenay, president of the section of finance in the council of state. His excellency the Marquis de Moustier charges me, in placing these notices before the Government of the United States, to convey to it, at the same time, the invitation to participate in the international monetary conference. It would attach even, in consequence of the early time at which the labors should commence, very special value to the information as soon as possible of the name of the delegate by whom the cabinet of Washington shall deem fit to be represented, and I would be very thankful to your excellency if you would, as soon as possible, inform me on this point.

There is no need to add that the commissioners will assemble without any programme arranged in anticipation. They will thus be able to look more freely for a solution of the difficulties which would oppose an assimilation between the systems actually in operation. This mode of proceeding, which has already received so happy application at the conferences of 1865, appears at this time of greater utility, inasmuch as different countries, while appreciating the importance of the object to be attained, would have the means of recurring to divergent opinions. The conference proposed has not otherwise any immediate object than to call out an interchange of views and discussion of principles; in a word, to seek for the basis of ulterior negotiations.

Accept, Mr. Secretary of State, the assurances of my high consideration.

BERTHEMY.

Hon. WILLIAM H. SEWARD, *&c., &c., &c.*

Mr. Seward to Mr. Berthemy.

DEPARTMENT OF STATE,
Washington, May 29, 1867.

SIR: I have the honor to acknowledge the receipt of your note of the 27th instant in relation to an international conference proposed to be held at Paris on the 17th of next month for the purpose of an interchange of views and discussion of principles, with a view to ulterior negotiations upon the subject of a uniform system of coinage. You express on the part of the imperial government a wish to receive early information of the name of the delegate who will be selected to represent the United States at the conference.

In reply I have the honor to inform you that the honorable Samuel B. Ruggles, who is now in Paris in the character of a scientific commissioner of the United States to the Universal Exhibition, and who is familiar with the views of this government, has been specially authorized to represent it on the occasion to the extent and in the spirit indicated in your note.

General Dix, the minister of the United States at Paris, has been requested to confer and co-operate with Mr. Ruggles to such a degree as may be convenient or necessary.

Appreciating the courtesy of the imperial government in notifying that of the United States of the proposed conference, I beg you to accept, sir, a renewed assurance of my highest consideration.

WILLIAM H. SEWARD.

M. BERTHEMY, *&c., &c., &c.*

PROCEEDINGS

OF THE

INTERNATIONAL MONETARY CONFERENCE

OF

1867.

PROCEEDINGS OF THE INTERNATIONAL MONETARY CONFERENCE OF 1867.

[Translation.]

OFFICIAL REPORTS OF THE PROCEEDINGS OF THE INTERNATIONAL MONETARY CONFERENCE.

FIRST SITTING.

MONDAY, *June* 17, 1867.

His excellency Marquis de Moustier presiding.

Were present—

For Austria: His excellency Baron de Hock, privy councillor, member of the House of Lords.

For the Grand Duchy of Baden: Baron Schweizer, envoy extraordinary and minister plenipotentiary of the Grand Duchy at Paris; Dietz, privy councillor, commissioner general of the Grand Duchy to the Universal Exposition.

For Bavaria: Messrs. De Hermann, councillor of State; De Haindl, director of the mint.

For Belgium: MM. de Fortamps, senator, director of the Bank of Belgium; Stas, member of the Royal Academy, commissioner of coinage.

For Denmark: Count Moltke Hvitfeldt, envoy extraordinary and minister plenipotentiary from Denmark at Paris.

For the United States: Mr. Samuel B. Ruggles, commissioner to the Universal Exposition.

For France: His excellency Marquis de Moustier, minister for foreign affairs, president of the conference; MM. de Parieu, vice-president of

the council of state, member of the institute, vice-president of the conference; De Lavenay, president of the section of finance in the council of state; Herbet, minister plenipotentiary, director in the department of foreign affairs; Dutilleul, director in the department of finances.

For Great Britain: Mr. Thomas Graham, director of the royal mint; Mr. Rivers Wilson, attached to the treasury.

For Greece: M. Delyannis, envoy extraordinary and minister plenipotentiary at Paris.

For Italy: MM. the Chevalier Artom, councillor of the legation of Italy at Paris; F. Giordano, inspector of the royal corps of mines, and commissioner to the Universal Exposition.

For the Netherlands: MM. Vrolik, former minister of finance; Mees, president of the Netherlands Bank.

For Portugal: MM. the Count d'Avila, peer of the realm, envoy extraordinary and minister plenipotentiary of his Most Faithful Majesty at the court of Madrid, commissioner general to the Universal Exposition; the Viscount de Villa Major, peer of the realm, member of the jury for the Universal Exposition.

For Prussia: MM. Meinecke, superior privy councillor of finance; Herzog, privy councillor of the department of commerce, commissioner to the Universal Exposition.

For Russia: M. de Jacobi, privy councillor, member of the Imperial Academy of Sciences at St. Petersburg.

For Sweden and Norway: MM Wallenberg, member of the first chamber of the Swedish Diet, director of the Bank of Stockholm; Broch, member of the Storthing of Norway, president of the central commission of Norway for the Universal Exposition.

For Switzerland: MM. Kern, envoy extraordinary and minister plenipotentiary at Paris; Escher, director of the federal mint.

For Turkey: His excellency Djemil Pacha, ambassador extraordinary and plenipotentiary from the Sublime Porte.

For Wurtemberg: MM. Baron de Soden, privy councillor of legation.

M. Clavery, "redacteur" of department for foreign affairs, was charged with the functions of secretary, associated with M. Roux, attached to the vice-presidency of the council of state, as assistant secretary.

The international monetary conference met for the first time on Monday, 17th June, 1867, at half-past nine o'clock, at the hotel of the department of foreign affairs, under the presidency of his excellency the minister for foreign affairs.

His excellency the Marquis de Moustier expressed to Messrs. the delegates the regrets of his excellency M. Rouher, who being obliged to preside at that very time in the imperial commission of the Universal Exposition, could not assist at this sitting. He then opened the labors of the conference by pronouncing the following allocution:

"The approximations which the late commercial reforms have wrought between the economic interests of nations ought to result in causing to

be appreciated more earnestly than in past time the advantages which would be derived from the unification of coinages. To substitute instead of the variety of monetary types actually in use, metallic coins struck in accordance with uniform regulations, and placed beyond any variations of exchange, would, in effect, be to remove one of the most serious obstacles to the development of international relations. Thus, when in 1865 the delegates of France, Belgium, Italy, and Switzerland had succeeded in forming between those four, a real monetary union, the thought of a more extended association naturally presented itself to their intelligence; thence came the right of accession opened to other countries by a special clause in the convention of December 25, 1865; thence the wish put forth by the commissioners, that studies should be undertaken, in concert, among all civilized states on the question of uniformity of coinage.

"No period could be more favorable to the realization of this wish than that of the Universal Exposition; the government of the Emperor hastened to avail of it, and the acceptance which various governments have pleased to extend to these overtures, have shown that the importance of the problem to be solved was universally recognized.

"The dispositions thus manifested from the outset are so much the more precious, as it was impossible to dissemble the difficulties of the task which the members of the conference have to accomplish. Those difficulties are of diverse nature, and to remove them it is important, beyond all, that each state, in view of the great interest it seeks to satisfy, should seek, without exclusive opinions, the best solution.

"The French government is, moreover, pleased, gentlemen, to recognize in the choice of yourselves, on the part of your government, a fresh pledge of the solicitude which, abroad as well as in France, is entertained upon the question submitted to the conference. A study of such delicacy and so complex could not be confided to an assemblage which could present a more complete combination of knowledge required either in the conduct of great affairs, in the management of important financial institutions, or in technical operations.

"The sittings, therefore, of the international convention open under the happiest auspices, and we may look to the result with confidence.

"I could have desired," added the minister of foreign affairs, in closing his remarks, "to have been able to participate with assiduity in your deliberations, but I have reason to fear, as also has the minister of state, that our many occupations will not permit us.

"In our absence M. de Parieu, vice-president of the council of state, will cheerfully direct the labors of the conference. I need not, sirs, attest to you the pre-eminent competency of M. de Parieu; you are aware that he has made the monetary question the object of the profoundest study, and you are acquainted with the remarkable writings in which he has published the results of his researches. The skilful direction which he

has already given to the preliminary discussions of the convention of 1865 is the guarantee of a like ability in this new conference."

M. de Parieu, expressing his thanks to the minister of foreign affairs, invoked the kind co-operation of the members of the conference to second him in the task which might be devolved upon him.

He then proposed to confide to a sub-committee the charge of preparing heads of inquiry, which would serve as the basis of deliberations. The sub-committee might be composed of seven persons, and should represent the three groups into which the different states are divided, in a monetary point of view, as having respectively adopted the gold standard, the silver standard, or the two standards.

His excellency Djemil Pacha suggesting that on the occasion of the last telegraphic conference, held at Paris, a sub-committee had been charged with preparing not merely heads of inquiry, but a complete plan for settlement, asked if it were not possible to proceed in that way on the present occasion.

M. Herbet remarked that at the time of the telegraphic conference all the states were represented by their diplomatic agents, assisted by special agents, principally heads of the administration of the telegraphs of their respective countries, and in some sort clothed with power to elucidate numerous questions of detail and the technical difficulties connected with the reform which it was proposed to accomplish. The present commission is not composed of like elements, and the members who compose it are present by virtue of delegations which do not establish similar distinctions. M. Herbet, moreover, approved the combination proposed by M. Parieu, adding only that the conference could, if it should think proper, increase the number of members of the sub-committee, perhaps, to nine.

M. Fortamps also assented to the proposition under consideration, as the best way of settling without loss of time the programme of questions to be solved.

Baron de Hock and M. Kern expressed the opinion that it would be convenient to devolve on M. de Parieu and M. Herbet the duty of designating the members of the sub-committee, the number of which might, in case of need, be raised to nine.

On the motion of M. de Moustier, the formation of such sub-committee was directed.

The sitting being suspended for some minutes, was resumed, and M. de Parieu submitted to the conference the names which follow:

To represent the countries which have adopted the gold standard—M. Graham, delegate from England, and M. the Count d'Avila, delegate from Portugal. To represent the countries which have the silver standard—the Baron de Hock, delegate from Austria, and M. Meinecke, delegate from Prussia. To represent the countries of the double standards—M. de Jacobi, delegate from Russia, and M. de Parieu, delegate from France; finally, as the seventh member, Mr. Samuel B. Ruggles, dele-

gate from the United States, and sole representative of the transatlantic countries.

The sub-committee, thus composed, would furnish all the guarantees of impartiality that were desirable.

M. de Jacobi observed that Russia has only one standard, that of silver.

M. de Parieu answered that this empire finds itself in this respect in the same situation as France. For both countries there is a kind of pre-eminence of the silver standard, but gold is equally a legal tender as silver, and the two metals are received without distinction in payments.

The conference decided that the sub-committee should meet to-morrow at ten o'clock at the council of state, and shall lay before it as soon as possible the proposed heads of inquiry (*questionnaire.*)

The sitting rose at eleven o'clock.

MOUSTIER,
President of the Conference.

CLAVERY, *Secretary of the Conference.*
ROUX, *Secretary Adjunct.*

INTERNATIONAL MONETARY CONFERENCE.—SECOND SITTING.

WEDNESDAY, *June* 19, 1867.

Mr. de Parieu presiding. The sitting opened at ten o'clock. Present, the commissioners who attended at the first meeting, with exception of his excellency Djemil Pacha and Mr. Vrolik, the latter being indisposed. M. Feer Herzog, member of the Swiss national council, takes his place among the delegates. The president informed the conference of a communication from the ambassador of the Sublime Porte, who, not being able to attend the sitting, has designated Colonel Essad Bey, military attaché of the embassy, to attend the discussions of the conference until the arrival of Mihran-Bey-Duz, member of the grand council of justice and director of the mint at Constantinople, special delegate of the Ottoman government. Colonel Essad Bey was admitted to participate in the labors of the commission.

The minutes of the first sitting being read and adopted, the president addressed the delegates as follows:

"Gentlemen, you heard at your last sitting the words by which the Marquis de Moustier, minister for foreign affairs, president of this conference, expressed to you, with all the authority of his high position, his thanks and the desires of the French government for the success of the labors which you are willing to enter upon with us in search of the proper means of development of a monetary unification, happily undertaken in 1865, with the sympathetic concurrence of M. Drouyn de Lhuys. You have been pleased to charge me with the preparation of a detailed programme for your labors, with the collaboration of six members of your conference, representing the more considerable states in the di-

verse groups among which the fundamental monetary systems of the world are distributed. It was incumbent on us to set to work, regretting to be deprived of the assistance of so many eminent men who could not be placed on the sub-committee, but whose precious co-operation will not fail us here.

"The '*questionnaire*' (interrogatories) which we prepared for you yesterday, gentlemen, has been distributed to you, and I ask permission to present to you a few brief remarks on the spirit in which it has been drawn up, and on the nature of the questions which may in some sort arrange themselves side by side with those which it includes.

"The monetary systems in use among various nations certainly bear traces of accidental varieties traceable to chance and the former isolation of nations, but it is incontestable that some of these varieties are not altogether fortuitous, but have relation to the economic condition of the countries in which they have been carried into practice.

"In this condition, monetary unifications, long desired, can be realized in our days only in the proportion in which these economic conditions can be approximated, and under which the monetary systems are less widely distant from what I would wish to call their point of maturity. To discern, on the one side, what relates to the circumstances which affect the economic history of nations, and on the other that which is fundamental in monetary science, is now our main endeavor; for if individuals and nations separate on what may rest on arbitrary will or caprice, they easily come together on a true and calm consideration of their situations.

"Notwithstanding this conviction, we have not been willing that all the doctrinal and scholastic questions which pertain to monetary science, a science still imperfect, should be textually laid down in the programme of your labors. They may present themselves incidentally, and, to a certain extent, are tacitly included. The questions we have the honor to submit to you all have a practical character, which we hope will meet your approval, as circumscribing difficulties and perhaps avoiding some idle problems. Allow me, in consideration of the number and the delicacy of the questions which, notwithstanding our reserve, it has been our duty to lay before you, to briefly invoke in advance your patient co-operation.

"The task assigned to us is difficult, as the minister for foreign affairs so judiciously remarked, but in my opinion it is powerfully commended to our efforts.

"The Roman empire had imposed on the ancient world monetary unification. We are assured that in the thirteenth century the religious and commercial ascendency of Italy made the golden florin current throughout all Christendom. Since that time the accidents of war have occasionally extended the range of certain monetary systems. An age which, like ours, has already effected so much for the approximation of nations by the community of the material means of intercommunication,

and of certain legislative institutions guaranteeing mutual interests, from the suppression of the *droit d'aubaine* down to international conventions for the execution of judgments and the extradition of parties charged with crime; from postal, telegraphic, and revenue conventions down to such as protect literary property; an age, the index of which, adopting the expression of one of the members of this conference at a former meeting, is the increasing recognition of the solidarity of the interests of all nations; an age which also honors and encourages the genius of peace, should it not require the peaceful discussion of the means of discharging, by the establishment of monetary unification, its debt to civilization? Permit me then, gentlemen, to count upon your indulgent aid, as you are assured of my devotion and my impartiality in pursuing this great task. If it is not for us to accomplish it immediately, I doubt not we are called on to prepare what will be useful in the future."

After this address, which was received with marks of unanimous assent, the "*questionnaire*," (or interrogatories,) prepared by the sub-committee in the following terms, was read to the conference.

Questionnaire.

1. By what means is it most easy to realize monetary unification; whether by the creation of a system altogether new, independent of existing systems—and in such case what should be the basis of such system—or, by the mutual co-ordination of existing systems, taking into account the scientific advantages of certain types, and the number of the populations which already have adopted them? In this case, what monetary system should be principally taken into consideration, reserving the changes of which it might be susceptible for making it perfect?

2. Is there a possibility of establishing at this time identities or partial coincidences of monetary types on a wide scale, on the basis and with the condition of the adoption of the silver standard exclusively?

3. Is there, on the contrary, a possibility of attaining this result on the basis and with the condition of the gold standard exclusively?

4. What of the like result in proceeding on the basis and with the condition of the adoption of the double standard, with the establishment of an identity of relations in all countries between the value of gold and the value of silver?

5. In case of a negative on the three preceding questions, would it be possible and beneficial to establish identities or partial coincidences of monetary types on an extended scale on the basis of silver coins, leaving each state at liberty to simultaneously regulate the standard of gold?

6. Would it be more possible and more beneficial to establish identities or partial coincidences of gold coins, leaving each state to regulate the standard of silver?

7. On the hypothesis of the affirmative solution of one of the two preceding questions, and following the distinctions which that alternative imports, would the advantage of internationality which coins of the metal

taken as the common standard would require, be a sufficient guarantee for their being kept in circulation in each state, or would it be necessary beyond that to stipulate, either for a certain limit in the relation between the value of gold and that of silver, or for the case where the international coins would run the risk of being completely expelled from circulation in some of the contracting states?

8. Is it necessary to the success of monetary unification to constitute at this time a unity everywhere identical for metallic composition, weight, and denomination; and in that case, upon what basis?

9. Would it be of advantage, in case gold should be adopted as the international metal, that the types of that money, determined by the monetary convention of the 3d of December, 1865, to promote unification, and consequent reciprocity, should be completed by new types; for example, by coins of fifteen francs and of twenty-five francs? In this case what should be their dimensions?

10. Would there be an advantage, under certain hypotheses—for example, in case of the affirmative on questions three or six—to regulate by common obligations certain points relating to silver coins or base coin, either in regard to their composition and standard or their limits of admission in payments, or to the quota of issue of each?

11. Is it practicable to define precisely the means of control which could be established for securing exactness in the striking of the common types of international money?

12. Aside from immediate practical possibilities, the object of the preceding questions, could any ulterior solutions be attained by doctrinal decisions, and on grounds of principle, with a view to increase in the future the approximations already effected in the past two years in Europe, or that could be immediately realized in this monetary matter?

The president calls for discussions of the totality of the *questionnaire.* No one claiming the floor, the draught of the *questionnaire* was adopted, and the investigation of the first question was commenced.

Mr. MEES declared that if he could admit the immediate realization of the unification of coinage, he would give the preference to the first of the two alternatives. In this case, in effect, the creation of a new system, avoiding all national susceptibilities, would seem to him the best way to attain the end. But it does not seem possible to him that complete uniformity can be speedily obtained, and therefore he considers the second alternative as being alone of a nature to produce actual practical results.

The COUNT D'AVILA did not hesitate, either, to place himself on the second alternative. If the different states found themselves obliged by the establishment of a system altogether novel, to change simultaneously their monetary regulations, the difficulties of the attempt would be multiplied in such manner that they would become insurmountable. In respect to the existing systems which should especially be taken under consideration, the Count d'Avila indicated the convention of December

23, 1865. The points then essential for solution, and for the adoption of which the delegate from Portugal was ready to vote, were, 1st, one standard only; 2d, the gold standard; 3d, reduction of the pound sterling to twenty-five francs; 4th, reduction of the American dollar to five francs; 5th, the adoption of the gold coin of five francs as the monetary unit.

On these bases an agreement would be easy between France, England, and the United States, and would sooner or later rally also the other countries. It would only be necessary that there should be identity of weight and of standard between the pieces—that the fineness of the English coin should be brought from 11-12ths to 9-10ths. The last-named standard tends more and more to prevail as to gold; it has been adopted by Spain for coin of this metal and for the silver dollar, which is the basis of the Spanish system, but the coinage of which has ceased since the standard of other silver coinage has been lowered to .810. In Portugal, where, as in England, coin was made 11-12ths fine, and where the mintage at this standard has been very restricted, the Count d'Avila thought the government would doubtless consent to a recoinage, the cost of which would be covered by the lowering of the standard.

What was more essential in the view of the delegate from Portugal was, that an agreement should take place between England, France, and the United States. This example would have a decisive effect. In any event, if the commissioners from the different countries would indicate at this time in a summary manner, as he has himself done, their views on the project of arrangement, the Count d'Avila thought nothing could be more adapted to hasten, as well as to elucidate, the progress of the discussion.

Mr. FORTAMPS could have wished that the question of standard was first established. It is an initiative point which it is convenient to settle at once, in order to base the deliberations on foundations as precise as possible.

Mr. HERBET remarked, that by reason even of the importance of this last question, there would be inconveniences in bringing it at once under discussion. It would be of advantage if delegates from the same state could come preliminarily to an understanding among themselves, and ask, if needful, instructions from their governments. The absence of the Spanish delegate, who is shortly looked for, is so much the more to be regretted, because Mr. José Polo would bring a large experience to bear on these subjects; at present, therefore, it might be well to confine ourselves to an exchange of general views on this point.

M. DE PARIEU explained that the first question had been framed in such manner as to embrace an order of ideas much more extensive than the question of standard. The alternatives therein presented are not pure hypotheses: the establishment of a new system having for unity the gram of gold; the generalization of the system having for basis the standard of silver, which, according to the Brussels committee, whose

views have been communicated to the conference, should be five francs; unification by means of approximation between the systems in operation; all these doctrines have been supported in the newspapers or in special publications.

BARON DE HOCK shared in the opinion of Count d'Avila on the impossibility of bringing about the acceptance of an entirely new system, and completely breaking up inveterate habits. In Germany we find in respect to this matter a striking example: there was a wish to introduce in the German states a coin which was not correspondent with any existing types. Although it was the most rational, and accorded perfectly with the metric system, it could not find its way into calculations. The gold crown only passed from the mint into the melting-pots of the goldsmiths. It is, as expressed in the second sentence of the first question, by the mutual co-ordination of existing legislation, by taking into account the scientific advantages of certain types and the number of populations which have adopted them, that a solution may be found. Among the systems actually in vigor, which is the one which would serve most advantageously as the basis of this approximation?

It would be, said the commissioner from Austria, the convention of 23d December, 1865, provided it were to undergo certain modifications, and the new agreement should rest upon the principle of the gold standard exclusively. This metal, which has spread in such considerable amounts through the European market during the last twenty years, would be the most convenient agent for a universal monetary circulation.

M. FEER HERZOG agreed with Baron de Hock on the fitness of adopting the second alternative proposed in the questions.

There is in France a school, important because of the scientific authority of its adepts, which admits no other monetary unity than metric unity in round numbers; and proposes to take for unit a weight of five grams of gold of 9-10ths fineness.

This theoretic solution would be wanting in one essential quality, that of practicability; at the time we have arrived at, we cannot invent a monetary unit which is not in relation with any type actually existing.

The franc itself had been compelled not to depart too far from the livre tournois in order to make itself acceptable, and, as the Baron de Hock has reminded us, the gold crown, containing ten grams of fine gold and weighing little more than eleven grams, has not been able to get into circulation in Germany because it is not adapted to the florin of Austria, nor the florin of Bavaria, nor the thaler of Prussia. By the very force of things it is a foreign coin, the napoleon, which represents beyond all others the monetary circulation of gold in Germany.

In a word, added M. FEER HERZOG, when the unification of monetary systems is discussed, it is, above all, necessary to inquire whether existing legislations do not present the elements of equation and of approximation. We must take into account the habitudes long ago formed of the great monetary reservoirs already created.

Without doubt, the metric system, in its application to weights and measures, satisfies by its admirable co-ordinations the necessities of practical character, as well as the exigencies of theory; but to desire to impose it, coextensively, in all its rigor, in matters of coin, would be to encounter obstacles which mere considerations of practical utility would not have removed.

In the opinion of M. FEER HERZOG, the system of the monetary convention of December 23, 1865, would best assist the equations of the English sovereign and the American dollar, and it would be sufficient to add some improvements, especially in what concerns the standard. Seventeen years ago the question was much discussed in Switzerland, and that country, which then had to choose between the diverse systems in application in the neighboring states, has only had to congratulate herself on having given the preference to that which is actually in force in the confederation.

M. JACOBI adopted in full the order of ideas developed by M. Feer Herzog. He would have been glad that a relation should exist between coins and the systems of weights and measures, but, in the double view of science and practice, he saw no necessity for establishing such relations to the prejudice of other more important interests. He could not, therefore, regard as serious the reproach cast on the gold coin of France, as having widened the breach in the French metric system, the integrity of which he acknowledged, and in favor of which he had categorically expressed himself on another occasion. The creation of an entirely new coinage was so much the less opportune that he would not let the occasion pass without noticing the agreement, perhaps accidental, but in fact almost complete, which exists between the intrinsic value of the principal French coins and those of Russia, which he represents in this assembly. Thus, the silver rouble coincides very nearly with four francs, the difference not being greater than the limit of the tolerance. In the same way the demi-imperial has a value only fifteen kopeks higher than the twenty franc gold piece.

M. HERMANN replying to a remark of M. de Hock, observed that if the gold crown has not kept in circulation it has been because it was not legal coin and was not received in the public banks.

M. STAS would prefer the establishment of an entirely new monetary system, and that the conference assume as its mission to settle principles and not expedients in practice. To follow the latter course would be to leave traces in snow not to engrave footprints in rock. The one would not create anything durable; on the contrary, it would prepare difficulties; for the future monetary unification will only be reached by first laying down an immovable basis, and in that M. Stas, contrary to the views of M. Feer Herzog, declares himself the partisan of the opinion of the economists, in the scientific point of view as well as in its application. The creation of a system based on a unit of gold of five or ten grams would offer the immense advantage of having it more readily ac-

cepted by all nations, as it would avoid all national susceptibility. Doubtless the adoption of the new unit would require the general remintting of all coinage, but this recoinage would bring with it a definitive system sanctioned by science.

The system of equations among the coins of different countries, in accordance with those of the convention of 1865, would also bring about the necessity of recoinage for the countries not parties to that convention. But would this recoinage have the needed immutability? M. Stas did not think so, and added that in this respect he spoke disinterestedly, considering his position as a representative of one of the governments cosigners of the act of 1865; but he looked at the question from the stand-point of the interests of England and the United States. From England is asked the equation of the pound sterling with twenty-five francs. This coin of twenty-five francs, of itself, will offer certainly some advantages, but what inconveniences will not its divisions produce? The half would be twelve francs fifty centimes, a number already fractional, and therefore inconvenient, and this inconvenience will only increase with successive subdivisions. As for the United States, the difference between the dollar and the five-franc piece renders the equation particularly difficult.

M. STAS added that, in his view, there does not really exist pieces of twenty francs, of ten francs, of five francs, seeing that no piece of twenty francs, for example, is exactly the one hundred and fifty-fifth part of a kilogram. Mathematically speaking, the kilogram cannot be divided into one hundred and fifty-five equal portions. With stronger reason, it cannot be, in the order of material facts. That would not be with a metric unity of gold; and it is only by manufacturing from all coins a new monetary system that we can reasonably hope to arrive at the establishment of a common measure in the values of various countries.

The PRESIDENT asked M. Stas if he speaks in the name of the Belgian government, or if this is his own personal opinion only.

M. FORTAMPS declared that the opinion expressed by M. Stas is shared by the ministers of finance of Belgium, but the Belgian government would not refuse to acquiesce in other propositions which should be adopted by the conference.

M. MEINECKE thought it of prime necessity to adopt as the base of the new system a system already recognized and reduced to practice. He did not pretend to ask the sympathies of the conference in favor of the Prussian monetary system, for he thinks that the standard of gold in the countries which have adopted it cannot be replaced by the standard of silver in force in Prussia only. Prussia, then, must renounce its standard if she wished to rally under a general monetary union. However, Prussia is content with the silver standard; the monetary circulation of which it is the basis is excellent, and there is no urgent reason for introducing there a change so considerable as that which would result from the change of this standard. On the other hand, the difficulty

of adopting the gold standard is much greater for Prussia than for any other country. Nevertheless, without having the thought of modifying at this time its monetary system, the Prussian government would not fail to take the matter into consideration if the labors of the conference should aim at establishing a basis for a general monetary arrangement. She would study with care the best means to connect her with it, and when resolutions in this respect shall have been adopted, she would communicate them to her northern confederates, whose concurrence is indispensable, and also to the states of south Germany, her cosigners of the treaty of 1857. M. Meinecke adds that with this reservation he would take part in the discussion, and would give his vote.

M. FEER HERZOG, replying to the remarks of M. Stas, said that the metric system would not probably claim scrupulous respect for its smallest parts. The metre, which is the basis, has not, practically, that sure scientific quantity of length which constitutes its definition. The terrestrial spheroid, according to one of the dimensions on which the metre is calculated, presents irregularities, and there could therefore not be found, in the metre itself that mathematical perfection which M. Stas seeks for. Nevertheless, the metric system offers great advantages, especially in the co-ordination of the different magnitudes which it includes, and which facilitate calculations.

It is certain that neither the twenty-franc piece nor the five-franc piece represent a fixed round number of grams, and in this point of view it would not be possible to give of them in grams a mathematical definition. But there is nothing to hinder the definition of the Napoleon by indicating the round number (155) which a kilogram includes, or rather that it should be defined by the fractionary number of grams which represent its weight, neglecting the decimals beyond the thousandths decimals which practically are of no importance and have only an interest purely scientific. It is not indispensable to the goodness of coin that it should be metrically proportioned.

It has been said it would be necessary to remint the English sovereign. That is a point for discussion. There is between the sovereign and the twenty-five franc piece a minimum difference of twenty centimes only. But this difference is very little beyond the limit of the tolerance; the reminting of the sovereigns would therefore not be of absolute obligation, and it would be possible to keep in circulation the pieces now in use, provided only that the new ones should be coined with the minimum of reduction indicated. M. Feer Herzog adds that as for the objection raised by M. Stas in respect of the United States, he can reply, that according to a letter from Senator Sherman, which had been communicated to him by Mr. Ruggles, member of the conference, opinions are pronounced in America for lowering the dollar value. That country is, therefore, ready, and the objection of M. Stas falls of itself.

In what regards the division of the sovereign, in case the value of that coin should be brought to twenty-five francs, it would not be necessary

to have coins of twelve francs fifty cents. The pound sterling would theoretically become to France a multiple of a new monentary unit which would be two francs fifty cents, a unit of which it would be the decuple, and consequently there would be no occasion to apprehend the numerous decimals which would follow the successive subdivision of the sovereign of twenty-five francs, as there would be on the hypothesis of the creation of coins of twelve francs fifty cents and of six francs twenty-five cents.

The Baron DE HOCK observed to M. Feer Herzog that the metre is a unit, not merely scientific but also real; witness the metre kept at the department of justice; the monetary unit might be kept in the same way. He was, besides, of the same opinion with M. Feer Herzog in relation to the division of the pound sterling, and added, that in Austria it is the intention to make coins of twenty-five francs. These coins will bear the name of ten florins, and as for their subdivisions the monetary commission at Vienna, presided over by Baron de Hock, has decided against a coin of twelve francs, fifty cents, and preferred that of ten francs, or four florins. There is nothing to prevent England from doing likewise. The objection of M. Stas, therefore, has not all the weight that he supposed it to have.

M. BROCH was of opinion that monetary unification must be effected, not only in view of the convenience of travellers, but above all for the sake of commerce it would be proper to have an understanding in respect to the subdivisionary coins as well as of gold coin in the interest of the laboring classes. It is essential that the coinage should everywhere offer subdivisions as equivalent as possible, so that the laborer who often has need of a fractional coin may not be the sufferer from variations which might exist in the diverse monetary systems respecting small change, and may be enabled to estimate correctly the real cost of his limited purchases. It is therefore for identities on the whole monetary scale that M. Broch reserved his approval, and not for simple partial coincidences between gold coin.

He declared himself, moreover, for the system previously recognized by the convention of 1865, and thought the tie which connects the gold coinage and the metric system (155 Napoleons to the kilogram) was sufficient, without there being need to create a new system, as M. Stas wishes to do. But it was to be remarked that the standard only of silver is in force in Sweden and Norway, and that, moreover, the commerce of those united kingdoms being principally with Germany, especially Hamburg, their adhesion to a monetary union would of necessity be subordinated to the preliminary adhesion of northern Germany.

The PRESIDENT, without contradicting the tendencies of M. Broch, must observe that they presuppose a preliminary reminting of all the gold and silver coinage actually in circulation in the states which would take part in the monetary union, while by a system of equations the reminting would not bear upon the fractional coins, but only on the large pieces, a distinction which M. Stas has not taken into account.

Mr. GRAHAM, through Mr. Rivers Wilson, replying to the assertion of M. Feer Herzog that sovereigns actually in circulation might be kept so because of the trifling difference which would separate them from the new twenty-five franc coins, said that, if it be true that the twenty centimes of difference are almost comprised within the limits of the tolerance, it is not the less true that the English government would make it a point of honor not to avail itself of these limits. There would, therefore, be serious inconvenience in leaving in circulation sovereigns of twenty-five francs twenty cents. In case of a new emission of sovereigns reduced to twenty-five francs, it would follow that the people, accustomed to divide by twenty, would call for the piece of twenty francs; thence the necessity for a second recoinage, and, in such case, the abandonment of the sovereign. The immediate adoption of the French system would be preferable.

M. FEER HERZOG remarked, that if the sovereign be reduced to twenty-five francs, and be divided, we obtain the double of the present shilling and not the franc. He added, that this double shilling exists in fact because it is the English florin, and consequently the reduction of the sovereign would not lead to its abandonment.

Mr. RUGGLES said it would be as impossible to abolish the expression of the dollar in the United States as that of the sovereign in England, but that both might be retained in reducing their intrinsic values. For the sovereign it would be a reduction of only twenty centimes; for the dollar, on the other hand, the reduction would be 3½ per cent. on its value. The United States were ready to make this sacrifice in view of monetary unification; such was the opinion of the American people, and after the next winter a general reminting of coin, however considerable, might commence. But this reminting must be made now or never, for if we examine the gold coinages of the great commercial nations we find them rapidly increasing. If this progression should continue the time would come when the reminting of the coinage of the United States would become practically impossible in view of the enormous cost of recoinage which would then be necessary. The United States from 1793 to 1849 actually coined but eighty-five millions of dollars in gold; in 1850 and 1851 ninety-four millions; from 1851 to 1866, 665 millions. During this last period of fifteen years France has coined about 955 millions of dollars in gold, and England 450 millions. We thus see that two milliards of dollars in gold, or more than ten milliards of francs, have been thrown into the money market since the discovery of the mines of Australia and California. This considerable mass of coin is increasing daily. It is certainly possible that in the United States, in the fifteen years which are to follow, the coinage of gold may reach the amount of five (5) milliards of francs. In view of such a future the American government would prefer to reduce its monetary unit at once. For that purpose it needs only the passage of a law briefly declaring that "the weight of the gold dollar shall be hereafter

1ᵍ 612ᵐ, .90 in place of 1ᵍ 670ᵐ." Those few words would serve to change the whole monetary system of the United States. But the United States, in thus consenting to recoin its gold now in circulation, would expect that France, on her side, will consent to coin gold pieces of twenty-five francs, in which case monetary unification would at once assume a practical form.

The PRESIDENT expressed to Mr. Ruggles the satisfaction with which the conference had listened to sentiments so favorable to monetary unification as those he had uttered in the name of the United States; adding that, in regard to the wish expressed for the creation of a twenty-five franc piece in France, this wish had already found its place in the questionnaire, and would be thereafter discussed.

M. HERBET laid before the conference a communication which had been made to him personally by Mr. Graham relative to the coin of Canada, about which there would be a question of recoinage on the basis of the convention of 1865. This was an important communication, and it would be of advantage if Mr. Graham would repeat it to the conference, which could take action upon it.

Mr. GRAHAM replied that nothing had been decided upon in this respect, but as there was an identity of coin between Canada and the United States, if the latter should approximate to the French monetary system, Canada would, of necessity, follow the example.

M. MEES said that he could only consider the first question in a theoretic point of view, and that his vote could not bind his government, seeing that Holland would not, at least at present, be able to conform to any monetary system whatever while surrounded by three monetary systems so different as those which are based upon the franc, the thaler, and the sovereign.

The Count D'AVILA resuming the question of the reminting of the English coin, discussed in succession by M. Stas, Feer Herzog, and Mr. Graham, expressed the opinion that if the pound sterling were reduced to twenty-five francs, the reminting of the English sovereigns, far from being an expense to the treasury, would probably be profitable to it, as the new sovereign would be inferior in fineness to the old. In fact, by reducing the fineness from $\frac{11}{12}$ to $\frac{9}{10}$, there would be a gain of more than 60 milligrams of pure gold for each sovereign. Besides, the adoption of the pound sterling for twenty-five francs would be sufficient, because naturally the subdivisions of the one coin and the other would correspond with each other; for example, there would be natural equations between five francs and four shillings, fifty francs and two pounds sterling, &c.

No one asking to speak, the president proposed to take the vote on the first question, pointing out at the same time the necessity for agreeing preliminarily on the manner of voting, individually or by states.

M. HERBET remarked, that, in conformity with precedents, the vote could only be taken by states; the French government, in fact, on in-

viting foreign governments to take part in an international monetary conference, left them at full liberty as to the number of delegates who should represent them. If the vote were *per capita*, some states would cast more votes, because their delegates might be more numerous. That is a consequence which could not be admitted. Without having precisely the character of a diplomatic assemblage, the present conference is, however, composed of members who have been furnished with preliminary instructions by their governments, and who should, in consequence, yield their individual opinions, so as to bring forward only those of the states they may represent, and it pertains to the first of the delegates of each state to utter its vote.

The mode of voting laid down by M. Herbet being accepted by the conference, the president put to vote the first paragraph of the first question:

"Is it more easy to realize monetary unification by the creation of an entirely new system, independent of existing systems, and in this case what should be the basis of this system?"

The conference decided unanimously in the negative.

The president then put to vote the first part of the second paragraph of the same question:

"Is it, on the contrary, more easy to realize monetary unification by mutual co-ordination of existing systems, taking into account the scientific advantages of certain types, and of the numbers of the populations which have already adopted them?"

The conference unanimously responded, yes.

The second part of the same paragraph thus framed was then put to vote:

"In this case what monetary system should be principally taken into consideration, reserving improvements of which it might be susceptible?"

Upon a suggestion from M. Fortamps, it was understood that the vote to be given did not determine the question of standard. The conference expressed itself unanimously in favor of the system of the monetary convention of 1865, annexed to this procès verbal. Messrs. de Hermann and Baron de Soden stated that all their votes were given subject to reserve in respect of anterior engagements of their respective states.

M. DE PARIEU stated that, in effect, the German states finding themselves mutually bound by the treaty of 1857, their reciprocal engagements do not permit them to act in severalty, except as far as Austria is concerned, which has quite recently freed herself from the engagement.

The examination of the second question was remitted to the next meeting, which was fixed for to-morrow at 2 o'clock.

The sitting was closed at half past twelve.

DE PARIEU,
Vice-President of the Conference.

CLAVERY, *Secretary of the Conference.*
ROUX, *Assistant Secretary.*

INTERNATIONAL MONETARY CONFERENCE—THIRD SITTING.

THURSDAY, *June* 20, 1867.

M. de Parieu presiding. The sitting opened at 2 o'clock. Present, the delegates who were present at the second sitting, as well as M. Vrolik, and excepting the Count de Moltke Hvitfeldt.

The minutes of the preceding sitting having been adopted, the president opened the discussion on the questions 2, 3, 4, 5, 6 and 7, which are strictly connected together, and thus framed:

2. Is it possible to constitute at this time identities or partial coincidences of monetary types, on an extensive scale, on the basis and with the condition of the adoption of the silver standard exclusively?

3. Is there, on the contrary, a possibility of attaining this result on the basis and with the condition of the adoption of the gold standard exclusively?

4. How much of like result in proceeding on the basis and with the condition of the adoption of the double standard and the establishment of an identity of relation, in all countries, between the value of gold and the value of silver?

5. In case of the negation of the three preceding questions, would it be possible and beneficial to establish identities or partial coincidences of monetary types on an extended scale, on the basis of silver coins, leaving each state at liberty simultaneously to regulate the gold standard?

6. Would it be possible and beneficial to establish identities or partial coincidences on the basis of gold coins, leaving each state at liberty to regulate the silver standard?

7. On the hypothesis of the affirmative solution of one of the two preceding questions, and observing the distinctions which the alternative imports, would the advantage of internationality, which coins of the metal assumed as the common standard would have, be a sufficient guarantee of their continuance in the circulation of each state, or would it be necessary beyond that to stipulate either for a certain limit in the relation between the value of gold and that of silver, or for the case where international coins would incur the risk of being completely expelled from circulation in some of the contracting states?

Mr. MEES avowed himself, for each particular state, partisan of a single standard, and, although representing a state whose system rests on the standard of silver, he did not maintain that this standard would be that which it would be proper to adopt in preference to gold; but he could forsee serious inconvenience in all the nations of Europe adopting the same standard, for this would exclude entirely from European circulation one of the two metals, while M. Mees considered them both as beneficial to be retained. It should not be forgotten that for trade with the extreme east, silver is the metal always in use; M. Mees would, therefore, be inclined to vote in the negative on the questions 2, 3 and 4, because he does not admit either the standard of silver exclusively

or the standard of gold exclusively, and he would only vote for the adoption of the two-fold standard in the event of the formation of a universal monetary union, an hypothesis whose epoch of realization cannot as yet be predetermined.

M. DE JACOBI could not perceive any necessity for agreeing upon the adoption of one or the other standard. It would be sufficient to stipulate that such and such coins should be received and accepted as legal coins, each State remaining, in other respects, free to strike other coin in accordance with convenience or the necessities of its internal transactions.

M. LAVENAY remarked that the difficulty was perhaps greater than M. Jacobi seemed to suppose it. The proposition just set forth would tend to nothing less than the establishment of the double standard in all countries. How could it be admitted, in effect, that the government of a state which should have the silver standard, which, for example, could only strike legal coin in that metal, could consent to attribute that privileged character to foreign gold coins? How could their subjects, their public banks, be obliged to accept metallic specie which it shall have prohibited in its own issues, and of which it would seem to admit implicitly the fitness?

In another point of view would not the same government have to apprehend a danger—that of bringing into the market of the country a foreign money which might drive out the national coin and thus give preference to a metal which it has deemed fit to discard from internal circulation in that State?

Thus, in the opinion of M. Lavenay, every country which, upon economic principles, should have adopted one standard only, could not accept the combination proposed.

M. JACOBI. Without being bound to stipulate for the employment of one and the same standard, governments might come to an understanding to coin pieces of equal value. The approximations would not present great difficulties. Thus the demi-imperial of gold varies little from the Napoleon of twenty francs, and if the Russian government should coin pieces of one rouble and one-fourth, it would obtain a piece equal to the five-franc piece of France, and at the same time preserve to itself the denomination of rouble.

M. LAVENAY admitted the facility with which these combinations could be attained between France and Russia, which have the double standard; but the case would not be similar between a country with the silver standard and a country with a gold standard, such, for example, as Prussia and England.

The PRESIDENT did not perfectly comprehend the practical bearing of the observations of M. Jacobi. In the opinion which prevailed at the drawing up of the *questionnaire*, and in which the members of the conference appeared to concur, the solution, now sought for, could only be found in one of the five combinations following the adoption by all the

states either of the gold standard or the silver standard, or the double standard, or, in fine, the standard of gold, with liberty to maintain for a time the standard of silver, and reciprocally.

M. FEER HERZOG indicated a certain connection between the remarks of M. Mees and those of M. Jacobi. They both think that the adoption of the same standard is not indispensable to the creation of a money which shall be universal. M. Feer Herzog was not of this opinion; for the specie, be it gold or be it silver, which should be intended for universal circulation, would become a simply commercial money, from the moment of their entry into a country where the monetary standard would be of a different metal. This would fall back on the inconveniences which the conference should particularly apply itself to remove.

As for the fear expressed by M. Mees on the subject of the total disappearance of silver, in case of the adoption of the standard of gold exclusively, it did not seem to be founded on a thoroughly exact appreciation of the situation. The world is divided in its monetary relation into two considerable and very distinct groups: on one side the western states, where gold tends more and more to prevail; on the other, the countries of the extreme east, where silver continues to predominate. Commerce, which develops itself more and more between Europe and those far off countries, cannot fail to keep up on this side a considerable circulation of silver. The adoption of a single standard in Europe and the United States would not, therefore, have the consequences which M. Mees supposes, and M. Feer Herzog regards the standard of gold alone as the basis of a true monetary union.

The PRESIDENT could only connect himself, to a certain extent, with this manner of discovering whether the conference had come to an understanding about the complete unification of monetary types; but in default of a solution so completely satisfactory, we might arrive at a specification of coincidences more or less numerous between certain types, and to obtain this result, which would not be without value, unity of standard would not be necessary. It would suffice that all the contracting states should have a common standard.

M. Baron DE HOCK would define somewhat further the object of the discussion, after having fixed the standard as being the prototype, the rule of weight, of fineness, and of the metal of the money of a country. He recollected that the conference, in declaring at the last meeting in favor of the system of the convention of 1865, had already fixed the weight and fineness of the standard it intends to propose. It now remained for it to determine upon the metal—shall it be gold or silver? M. Hock would vote for the gold standard, and as for the double standard, it did not seem to him, in the same manner as to M. Herzog, susceptible of service in the formation of a monetary union.

The Count D'AVILA supported the judicious consideration developed by M. Lavenay. He did not think that countries with the silver standard could have an understanding with countries having the gold stand-

ard for the establishment of equations of their monetary types. M. Hermann set forth the importance of looking at the question actually under discussion from the stand-point of view of the population of states which represent, on the one hand, the standard of gold or the double standard, and on the other, the standard of silver.

The PRESIDENT reminded the meeting, on this point, that if European states only were taken into account, if abstraction was made of Asia, the monetary circulation whereof could not be confounded with that of Europe, and whose population is besides compensated in a certain degree by the population of the American continent, the following results are obtained: One hundred and eighty millions of inhabitants in states which use the gold standard, or the double standard, against sixty millions in those which hold the silver standard. The decision could not be doubtful. The president having remarked that the United States were in the like situation with France,

Mr. RUGGLES answered that this double standard did not practically exist, and that therefore the United States did not seem to him to be in position to be comprised among the countries having a double standard.

The original act of Congress, which was passed at a time when we were less enlightened than to-day, either by study or experience, sought to establish a double standard by giving to gold coin and silver coin equal legal currency in payments, whatever might be the amount of the debt.

In 1853, in view of the considerable change which had been experienced in the respective value of the two metals, and which was then in the way of increase, the double standard was practically abolished by the reduction of about seven per cent. in the weight of the fractional pieces of the silver dollar, and by the declaration that all the divisional coins which should subsequently be struck should be a legal tender only for the payment of debts not exceeding five dollars. It is true that the silver dollar is still retained as lawful money for debts of any amount, but of a total silver coinage of 136,351,512 dollars, 4,366,340 only are in dollars, while $131,985,472 consist of subdivisions of the dollar.

Almost all the divisional pieces which had been coined before the passage of the law of 1853 have disappeared, in obedience to the fundamental and inexorable law of demand and supply, which sets at naught all attempts made to fix by legislation the relative values of the two metals. The legislators and the people of the United States have sufficiently learned, if not by study, at least by experience, that the system of a double standard is not only a fallacy, but an impossibility, in assuming a fixed relation between the values of two different products, gold and silver. The value of each of these depends upon the quantity produced, and this quantity is beyond the power of legislation. A diminution of value is, and ever will be, the inevitable result of the increase of supply.

During the fifty-six years which immediately preceded the year 1850,

the United States coined in gold $85,588,038, and in silver $75,322,969, which represents a supply of about $1\frac{12}{100}$ of gold to one dollar of silver. From 1850 to 1866, inclusive, the coinage of gold has been $759,648,453, and of silver, $59,027,843, which represents about twelve dollars and fifty cents in gold to one dollar of silver.

Admonished by so great a change in the relative supply of the two metals, the United States now share, without reserve, the conviction, more and more extended through the civilized world, that it is impossible to establish a double standard, which must presuppose a fixed relation between the values of the two metals.

M. FORTAMPS recollected that in the conferences of 1865 he had already had occasion to declare that the Belgian government, after having been the partisan of the silver standard, considered, in view of the effects which took place in the monetary circulation of Europe, the standard of gold as the only one that ought to be adopted. M. Fortamps renewed, to-day, that declaration.

M. MEINECKE would not adopt either the second question, or the fourth, fifth, sixth, or seventh questions. He would vote for the third, that is, for the adoption of the gold standard exclusively; but must add that, for countries which, like Prussia, have the standard of silver exclusively, it would be necessary to prepare the change from one standard to the other by measures of transition. What should they be? M. Meinecke, not being furnished with any instructions, does not choose to anticipate them.

The PRESIDENT took note of the very important declaration which has just been made by the delegate from Prussia. He added that the eventual fitness of the adoption of measures of transition was provided for in the "*questionnaire.*" M. Meinecke explained that he would fear that if the terms of questions five and six should be adopted without reserve, certain states could not keep up the double standard. It would therefore be proper to restrict expressly to the period of transition the time during which the silver standard might be maintained simultaneously with the gold standard.

M. WALLENBERG stated the situation and the views of Sweden. Formerly that country had two standards, the ducat in gold, the rix thaler in silver. The value of the ducat was precisely the equivalent of two rix thalers. As for the rix thaler it was composed of $\frac{86}{100}$ fine silver, and corresponded with the rix thaler of Hamburg. Nine and a quarter rix thalers weighed a pound of Cologne. Each rix thaler was divided into 48 shillings, and the shilling into 12 runstycken. In consequence of the general disturbances at the beginning of the century, gold and silver disappeared, and were replaced by notes of the state bank, having compulsory circulation. When, in 1830, the state bank resumed payment in silver, it was wished to base the coin on the weights of the country; one law decided that silver should be coined at $\frac{75}{100}$ fineness, and that 25 rix thalers should weigh two pounds Swedish; it provided at the same

time that the ducat should contain $\frac{23}{24}$ of fine gold, and that 125 ducats should weigh one pound Swedish. It resulted from the new law that the intrinsic value of the rix thaler became a little higher than before.

Formerly the pound of Cologne was equal to $9\frac{1}{4}$ rix thalers; it became only equal to $9\frac{1}{6}$ rix thalers. This difference, although slight, was not the less prejudicial to Sweden, considering that it has never been observed in the trade with Germany and Denmark. In this respect M. Wallenberg observed that England would take great interest in reducing the sovereign to 25 francs, as has been indicated to the conference, for the pound sterling is given in considerable quantities as the equivalent of 25 francs. Returning to the legislation of Sweden, M. Wallenberg added that, from 1847 to 1854, it had been sought to introduce the metric system into the weights and measures of the kingdom, and that this had not been entirely successful in consequence of the resistance of the clerical order and of the agricultural interest; but the decimal system had been admitted, maintaining at the same time the ancient unities. Thus, as to coins, a law of 1855 had decided that the rix thaler ryxmynt should be coined of $\frac{75}{100}$ fineness, should weigh $\frac{2}{100}$ of the Swedish pound, and should be divided into 200 öres. At the end of eight years, 1863, this reform was accomplished.

In brief, there exist in Sweden two standards without fixed relative values—the rix thaler for domestic use and with neighboring countries, the ducat for international money. M. Wallenberg expressed the opinion that monetary unifications could only be established on the basis of the gold standard exclusively, that metal offering the best qualities for circulation; the silver standard should not be preserved except during a time of transition in countries which have it at present, as Sweden has. In the opinion of the Swedish delegate, the unit of international coinage should be a piece of gold of the value of 10 francs, at $\frac{9}{10}$ fineness, giving 310 pieces per kilogram, and represented in its lowest subdivision by the thousandth part, that is to say, the centime.

M. JACOBI would think proper to admit among the measures of transition to be adopted, that debtors might make their payments in one or the other metal without distinction, at the rate of the day.

The PRESIDENT replied that this would disavow the legal money, and would reduce the two coinages to the grade of commercial interchanges, which would not be tolerated by the population, especially in France, where they would never consent to receive money the value of which would vary every day.

M. VROLIK thought the solution of the difficulties which are the actual subject of discussion might be found in the examination of the sixth question.

The PRESIDENT proposed a vote on the third question, proposing the adoption of the silver standard exclusively. The conference decided unanimously in the negative.

The discussion then opened on the third question relative to the adoption of the gold standard exclusively.

M. FEER HERZOG mentioned M. Meinecke's vote on the second question as being particularly important. Prussia was, in fact, the most important of the states that have the silver standard, and to vote for the adoption of an exclusive gold standard, as the delegate from that country had just done, was a declaration of very significant importance. M. Wallenberg, of Sweden, had voted in the same way. A great difficulty had thus disappeared, and now preferences can be openly declared for the exclusive gold standard. The monetary system of Switzerland was necessarily subordinate to that of the larger neighboring states, particularly France; yet the minutes of the conference of 1865 showed that, even at that time, all the sympathies of the federal government were for the single gold standard. A similar declaration was also made at the same time by Belgium and Italy. The Swiss government had not altered its opinion since then, and it was now ready to renew the declaration, though bound by the convention of 1865. Therefore it proposed to decide the third question affirmatively. M. Feer Herzog added, that in an assembly composed of well instructed men, like the members of this conference, he would not produce the customary arguments in favor of a gold standard, but would point out the absolute necessity of adopting the metal that constitutes the mass of the monetary reserve as the general standard.

Baron DE HOCK said he would vote with M. Feer Herzog in the affirmative on question third. The reason he gave for his opinion was that men of merit have written in favor of the double standard. It was particularly asserted that the system would diminish the monetary crises, in tending to establish a sort of equilibrium between the two metals. But it is the sum total of money in circulation that influences the value of things sold, and not the relative proportion of the metals. If the amount in circulation increases, prices fall. With the double standard it is like opium—it is a useful medicine in some cases, yet nobody would use it every day, because it would then become a poison. The double standard might be very useful in financial crises, but it would be very inconvenient in general use, on account of the daily changes in the relative value of the two metals. It exercises an evil influence on the Bourse, for the fall in stocks is always greater in countries where the double standard exists than in those where the single standard prevails. While voting for the single gold standard, M. de Hock admits that in countries where a different system has hitherto prevailed, it might be necessary to continue the double standard, for a specified time, to be determined in advance.

The PRESIDENT remarked that M. Feer Herzog's and Baron de Hock's observations have been very pertinent to the question. The situation of the states of the convention of 1865 is not now in question, but that of Prussia, Sweden, and the Netherlands, that have the silver standard. Their situation is delicate, and we must attend to them. Should the transition period be of one or many years? If one year was fixed upon,

and it was decided that debts should be paid at such a rate after that time, silver would fall, and gold rise exorbitantly; therefore a year would be too short. Perhaps it would be better to leave each state, as M. Vrolik proposes, to decide upon the time when they thought proper to modify their monetary systems, and when they could do it without disturbance, that is, after gold had nearly driven silver out of circulation.

M. MEINECKE thought it would be well to introduce a reserve in question third, in order to give the silver standard countries the chance of adopting the double standard temporarily, in case of an affirmative vote for the exclusive gold standard.

The PRESIDENT thought it essential to fix the measures of transition at once, if possible, and agreed with M. Meinecke that it is impossible to pass to the single gold standard without going through the double standard. The same opinion was expressed by Lieutenant General Mansfield, on the subject of the monetary system in India, where the silver standard prevails, which should be supplied by the double standard till the exclusive gold standard could be reached. M. Parieu added, moreover, that the best way to substitute gold for silver in general circulation, would be to fix a certain relation between the two metals, which is the subject of question seven.

M. MEES proposed to substitute the word *temporarily* for *simultaneously*, in question six.

M. MEINECKE said the words *at this time*, in question two, caused his reservations.

M. LAVENAY believed the general opinion of the conference to be already in favor of gold as the only standard. Admitting this, the only remaining difficulty is the transitory measures, and question third might now be decided affirmatively, and adding, "saving arrangements necessary to carry it into effect."

M. BROCH thought gold ought to be the only standard, and that the free coinage of silver ought to be prohibited in countries where that standard prevails. In some countries any person can take bar silver to the mint and have it coined at a small cost. Individuals ought to be deprived of this right; the state alone should have the privilege of coinage, and ought to limit the quantity of coin issued to so much per head. This provision ought to be made now for the five francs of the convention of 1865. If such a precaution is not taken, and a sudden revolution rendered silver more abundant than gold in Europe, the same difficulties that now exist from the expulsion of silver would then happen inversely. So, private individuals ought only to be allowed to coin their gold.

The PRESIDENT thought there was an agreement upon the question of a single standard—differences only existing in regard to the mode of transition; so, to conciliate divergent opinions, he proposed the fusion of questions three and six.

M. MEES, adhering to what he said at the first of the sitting, would

not vote for the adoption of question three, nor for the proposed fusion. He considered it inconvenient to adopt the gold standard everywhere, because it would reduce silver to change-money, and consequently gold would rise in value. He thought it not desirable to choose between the two metals at present. Moreover, M. Mees thought a monetary union not very certain to be adopted, and that the labor of the conference, to use a figure of M. Parieu, "is only a seed sown, the germination of which cannot be foreseen."

The PRESIDENT then proposed to decide question six in the affirmative, completing it by limiting the value between the two metals, as provided for in question seven.

M. JACOBI thought the question of standard not sufficiently investigated. Supposing two standards, how long would the fixed relative value between them exist? The proportion is essentially variable in theory, and there are perpetual changes in the reciprocal value of the two metals.

The PRESIDENT thought the result of the variations in value of the two metals, when both are circulating, will be to drive out the more precious metal, in a certain proportion, equivalent to the change in value. Even when the relation is changed, theoretically speaking, monetary circulation is not so much affected as is supposed, on account of bank deposits and private savings. There is always a certain quantity of specie in every small place, that only circulates among its inhabitants, and never gets out of a certain circle. Great masses must be operated upon to find a profit in the exchange of metals, and the change of metals takes place slowly by successive movements.

For these reasons the general circulation is neither suddenly nor sensibly affected by changes in the relative value of metals, for France has always had much silver in circulation, even when that metal was largely exported.

M. JACOBI thought if the gold standard alone were adopted, the silver in banks would be put into circulation, gold would take its place and rise in value. He said there is scarcely any gold in Prussia, and he asked M. Meinecke if the Frederic price of gold is very variable in the Berlin market.

M. MEINECKE said there are but few gold Frederics in circulation; none have been coined since 1831, except those much worn by use, and since 1857 none have been coined. It has a fixed legal circulation, so that there is no profit in recoining it.

M. VROLIK thought the transition from one system to the other would be slow; that equations and identities would have to be created between the coins; and the right granted to each state to fix the current value of the coins, as is done with the Frederics.

M. FEER HERZOG said that would not be forming a monetary union, but would be maintaining what now exists in Germany in regard to the Napoleon.

M. VROLIK thought the Napoleon would be received in banks, and not have a legal circulation.

The PRESIDENT said that would be going back to the double system. He then put question three to the vote.

M. LAVENAY repeated M. MEINECKE'S observations tending to a fusion of numbers three and six.

Baron DE HOCK thought the privilege of preserving the double standard for an indefinite time should not be left to any state; question three ought to be settled at once, by fixing a period of transition, as was done with question two.

M. ARTOM proposed to add these words to question three, "with the reservation of transitory measures."

M. HERMANN insisted that each state shall have the right to adopt any transitory measures it thinks convenient.

M. HOCK thought the states should not have the choice of these measures.

M. HERMANN insisting upon his opinion, Count AVILA proposed to add these words to question three: "Leaving each state the liberty of keeping the silver standard temporarily." As gold would drive out silver whenever they circulated together, this amendment should meet with no practical objection, and the temporary maintenance of the silver standard together with gold would not last long from the force of circumstances.

M. KERN would not continue the debate, but must insist on reading the instructions from his government: "If the question of the gold standard, which was rejected in the conference of 1855, is brought up, the delegates will vote as they were instructed in 1865; that Switzerland prefers the gold standard, but will be governed by the other states signing the convention of 1865." He added, that he did not know what conclusion France will come to, which made his situation delicate; but he thought the gold system cannot be adopted immediately, a transition period is necessary, and therefore he thought it better to complete question three with these words, "with the reserve of transitory measures," already proposed by M. Artom, than to adopt the less general proposition of Count Avila.

Count AVILA said, if the conference adopts Mr. Kern's proposal, he is disposed to second it. He is not much interested in the transitory measures now discussed by the conference. As a representative of a country with the exclusive gold standard, he will vote in favor of question three.

The amendment he proposed was to bring the states with a silver standard to an affirmative vote on question three. In granting the silver standard for a certain time, a general understanding would be arrived at, and a great advance would be made in monetary unification by accepting gold coins at a legal rate. For the silver standard countries that accepted the double standard would make gold the chief cur-

rency thereby, as is now the case in the states that accept the convention of 1865. In fact, in those countries the double standard exists only nominally; silver coins have become the change-money, and the five-franc piece, the sole representative of the silver standard, has only a nominal existence.

The PRESIDENT preferred Count Avila's proposal to M. Kern's. As transitory measures in silver standard countries are in question, we must not omit the most important of them, the provisional maintenance of the silver standard by the side of the gold standard.

Mr. GRAHAM accepted Count Avila's amendment, substituting the word *transitorily* for *simultaneously*, in the last part of question six, annexed to question three.

Messrs. KERN, HOCK, and ARTOM supported Count d'Avila in this substitution of terms.

After remarking that question six is suppressed, the president put question three, thus modified, to the vote:

"On the contrary, is this result attainable on the basis and condition of adopting the exclusive gold standard, leaving each state the liberty to keep its silver standard temporarily?"

The vote was unanimous in the affirmative, with the exception of the Netherlands.

M. VROLIK, invited by the President, explained that he voted against it because the modification goes beyond question six, where the word *transitory* is not found in the first draught.

This expression seemed to him to imply a time fixed in advance, and beyond which the silver standard is to give place to the gold standard. He would have voted with the other members of the conference if each state had been left the judge of the time it should keep the double standard. If the states joining Holland come to a mutual understanding, then Holland will be forced to imitate their example.

The PRESIDENT proposed to continue the discussion of question seven, questions four, five, and six having been solved negatively by the adoption of the affirmative on question three.

At the suggestion of Baron de Hock, the conference decided to meet next day, Friday, at ten a. m., for the continuation of the debate.

The sitting adjourned at half past five.

PARIEU,
Vice-President of the Conference.

CLAVERY, *Secretary.*
ROUX, *Secretary adjunct.*

INTERNATIONAL MONETARY CONFERENCE.—FOURTH SITTING.

FRIDAY, *June* 21, 1867.

M. Parieu presiding. The sitting opened at ten o'clock. Present, the delegates of the preceding sitting and Count Moltke Hvitfeldt, with the exception of Baron Schweizer.

Count MOLTKE said he voted with the majority on questions two and three, which were decided during his absence, with this reserve, however, that he does not pretend to oppose the monetary system of Denmark to that of the neighboring countries with which it has most business.

Baron DE HOCK asked permission to state why he voted for Count Avila's amendment on the wording of question three, to which he objected at the last sitting.

As decidedly in favor of the adoption of the exclusive gold standard, he would not have hesitated to vote for question three as originally drawn up; but modifying it by M. d'Avila's amendment, and then putting it to vote, forced him either to accept a form he did not approve of, or to vote against the gold standard; therefore he did not hesitate to vote in the affirmative. He laid aside personal preference, so as to put no obstacle to the acceptance of the principle of the exclusive gold standard by states having the silver standard, and determined to regulate the transitory measures for its abolition, as M. Meinecke and M. Hermann say they will. M. de Hock moreover thought that if the new wording of article three is defective, the practical consequences will be lessened by special conventions between the states. Stipulations of a nature to limit the action of each government in regard to transitory measures might be introduced, and in discussing question seven the too general meaning of the amendment to question three might be restricted.

The PRESIDENT said the decision at the last sitting would be no impediment to certain transitory measures suggested by the conference, such as fixing a minimum limit to the relations between gold and silver, which is the subject of question seven.

Viscount VILLA-MAJOR thought, before examining this question, it would be better to begin by determining what present coin could be adopted as a general unity of the monetary system, and he thought it would be very well for the delegates of each state to draw up a plan of equations between their present coins and the monetary unity they would like to see adopted. These equations might serve as a basis for the proposed unification. Portugal would willingly adopt the five-franc piece as a unity, as it already has the *reis* at the foundation of its monetary system, and if its minuteness renders it defective, it has the advantage of representing with tolerable precision the thousandth part of the five-franc piece. Therefore, he thought some preliminary discussion of question eight should be entertained.

The PRESIDENT recalled the incidental decision of the conference in

favor of reducing the dollar to five francs, and the sovereign to twenty-five francs. The question did not concern the florin and dollar countries, and therefore M. Villa-Major's proposal would suit them. The conference could do nothing better than to agree unanimously upon the adoption of a single monetary unity, and M. Parieu believed no better piece than five francs, or one of its multiples, could be selected.

M. WALLENBERG mentioned in the preceding sitting that the gold piece of ten francs seemed to present peculiar advantages. Divide it by 1,000 and you have the centime, which is an excellent small monetary subdivision, while the five-franc piece divided by 100 gives five centimes, a too great fraction for small payments. In large transactions the ten-franc piece forms a good medium coin, a unity neither too high nor too low.

The PRESIDENT liked M. Wallenberg's opinion; in fact, the piece of ten francs, taken as a monetary unity, would be very convenient for France, as in accounts it would only be necessary to change the comma to express new unities. Formerly the ten-franc piece had a universal circulation under the name of *ducat*, a piece that was nearly of the same value. It was also the smallest gold piece till the five-franc piece was coined to supply the place of the silver five-franc piece, which was driven out of circulation.

M. MENEICKE would not discuss the question; he thought the principal coins ought to be brought together by simple equations, each state remaining free to adopt the unity it pleases, provided its coins are easily changed to coins of other states. The principal unities would thus be assimilated, and therefore he was not authorized to pronounce in favor of fixing a monetary unity.

The PRESIDENT agreed with M. Meinecke that the coins should be easily exchanged; but there must also be a common denomination for them, and the smallest that could be conveniently adopted for gold seems to be the five-franc piece.

M. MEINECKE suggested a smaller unity, two francs fifty centimes, for instance.

M. JACOBI preferred five francs, because it has whole numbers for multiples, as 10, 15, 20, 25, &c., whereas the unity of 2.50 would require fractional multiples.

M. HERBET remarked that the unity of 2.50 in gold would be inconvenient to coin; and he instanced the 1.25 pieces that were issued at one time in Turkey, and found too soft and too small.

M. STAS thought the remarks about monetary unity would come in better with the discussion of question eight, and added that the 2.50 unity suggested by M. Meinecke would have the disadvantage of creating too many gold coins, and it would be difficult to tell them apart.

M. KERN agreed with Mr. Stas, and the conference determined to postpone it till question eight is discussed.

The PRESIDENT then read question seven:

In case of an affirmative vote on one of the two preceding questions, would the internationality of the common standand coins be a sufficient guarantee of their circulation in each state; or would it be necessary to stipulate a certain limit in the relative value of gold and silver, or make provision for the case where the international metal might be expelled from circulation in any of the contracting states?

The PRESIDENT remarked that this question regards the organization of the transitory situation of the states that have not the gold standard. Its principal aim is to harmonize the transition measures without affecting the decision of the conference in favor of the gold standard. It is necessary to make a correct estimate of the relations between gold and silver, and if the rate of gold in Prussia and Holland were known exactly, mediums of exchange could be established that would gradually introduce gold, and expel silver from circulation, in the countries where it has served as a standard, without a financial convulsion.

M. MEES said, in Holland, if the rate of exchange continues the same as it has been for the few last years, the florin would be worth 2 francs 13 or 14 centimes, and the Napoleon 9 florins 35, or $\frac{1}{2}$. But it is hard to say how long the present rate of exchange will be kept up. In late years the value of gold has been sustained by its great demand in France, and the proportionate expulsion of silver. At present there is no more silver in France, and gold has taken its place in circulation. The same want of gold is not felt now, and its value may diminish, particularly if it continues to be produced in considerable quantities. In such a case silver would rise; and knowing this, a state like Holland, that wishes to keep its silver circulation, would find some difficulty in fixing a definite relation between the two metals. Nevertheless, in the border provinces, the Napoleon might be rated at $9\frac{1}{3}$ florins, and 4 thalers at 15 francs or 7 florins of Holland, this last being equivalent to the florin of south Germany, though it has a value less than seven-thousandths. This par equality between the two florins in the Netherlands is caused by the large exportation of silver to India, the silver diminishing so fast it is necessary to coin it continually.

M. MEES added that if the gold standard were generally adopted and became the principal agent of general circulation, the difficulty in fixing a rate between the two metals would no longer exist, because, so far from diminishing in value, gold would rise, and then there would be no danger in an approximate rate.

The PRESIDENT. It would be useful for the conference to examine these questions of relations between the two metals; for, if a preferred currency were given to one of them in a country, it would not only affect the circulation in that state but in the adjacent countries. There are great differences in Europe between these relations in countries where the double standard exists and where these relations are fixed. Thus in Russia the relation is 1 to 15, he believes.

M. JACOBI said the relation in Russia is 1 to 15.45; it was 1 to 15 when

the half-imperial was worth exactly five rubles, but it was fixed at 15.45 after the half-imperial rose to five rubles and 15 kopecs. He asked if the gold coins are to be reckoned according to their intrinsic value.

The PRESIDENT said the fineness must be balanced against fineness, and adds that in Russia the relation between gold and silver is 1 to 15.45; in Spain from 1 to 15.48; in France 1 to 15.50; and in the United States about 1 to 16. Gold is the principal currency in this country.

M. FORTAMPS remarked that if the Napoleon were rated 9⅓ florins, as M. Mees mentions, it would produce an infinitesimal fraction. In the old Netherlands the florin was worth 2 11.64 francs; since its reduction in Holland it is worth 2.10 francs, and reckoning from the value of this florin, the Napoleon would be reduced to 19 francs 60 centimes, thus losing 40 centimes. Under such circumstances gold would never circulate in Holland. What M. Mees says about the par of Holland and German florins, despite their difference in value, is true commercially but not theoretically. Now, for international coins, we must consider their intrinsic value, and not the laws of exchange.

The PRESIDENT thought that the valuation of the Napoleon at 9⅓ florins, making the relation 15.19, is small, and that the minimum ought to be between 15.25 and 15.30. The particular position of Holland ought to be considered on account of its East India colonies.

M. MEES said, in Mr. Leon's work, published in 1860, the relation is less than he proposed; it is 15.17. The kilogram of gold being worth at that time 3.460 francs, and the kilogram of silver 228 francs, we find the relation is 1 to 15.175.

M. FEER HERZOG thought that is a mistake. The lowest relation was in 1859; it was then 15.21. At London, in 1860, it was 15.27, and by present quotations in Paris it is 15.46.

M. MEES answered the relation in 1859 was an average for the whole year, and therefore M. Leon's figures are right.

M. FORETAMPS thought it well to arrive at a minimum relation. That proposed by M. Parieu, 15.25, is too low. It ought to be fixed at 15.45, so that a gold circulation could be established in the silver standard states. Moreover, the gold standard countries would never consent to fix the rate of silver coins, as they would thereby suffer a loss without compensation.

Baron DE HOCK thought that in discussing question seven we ought to fix upon something permanent. If the convention enters into the discussion of transitory measures he thought it would be best to leave them to be settled by special conventions hereafter; no inconvenience could result from that in monetary unification, for it is evident that the silver standard countries could not establish relations between the two metals so as to exclude gold from circulation without contradicting the vote given by the conference in favor of gold. Therefore he thought the establishment of these relations ought to be left to special conventions, and then each state could act as it thought best.

The PRESIDENT said the sub-committee proposed question seven in anticipation of the adoption of the double standard, leaving each state to continue it as long as it pleased. The conference went still further in its vote on question three, by deciding that the double standard should be transient, and ought to cease at a certain time, fixed in advance. Consequently, a greater sanction is necessary to introduce gold into circulation in those states, and the opinion adopted by the conference ought to be consecrated in its consequences as in its principle. It should be declared that the relations between gold and silver ought not to be fixed below a certain minimum, to be determined by the conference. Special conventions could do it, but would not the situation of the countries concluding those treaties be better if they could rely upon a decision of the conference? To take Holland, for example, it would be easier to induce its plenipotentiaries to give up the proposed relation of 15.19 offered by M. Mees, if the conference had previously decided that the minimum relation should be 15.25 or 15.30.

M. FEER HERZOG thought the question put erroneously, and that there is antagonism between the establishment of a system of equations and the fixing of a relation. For instance, four thalers being worth fifteen francs, if, with the fictitious gold thaler (3.75 cents), the old silver thaler, which is somewhat less, is allowed to circulate, the relation will be between the weight of gold in the fifteen-franc piece and the weight of silver in the thaler.

M. ARTOM thought a relation between gold and silver may be established in two ways, namely, by equation and tarification; but he thought it easier to proceed by equation.

M. LAVENAY asked if the question of relation between the two metals is not more properly an internal than an international question. It would be international if two universal moneys were to be created, one of gold and the other of silver. In that case a relation would have to be established. But gold has been selected as the international coin, and silver will be a temporary legal currency in the states with a silver standard and a double standard. In that case all international negotiations would be transacted in gold; and whether dollars, Napoleons, sovereigns, or four-thaler pieces are received, payments will always be made in the terms and provisions of the convention. Therefore it does not seem necessary to stipulate a relation between gold and silver; for if one state establishes a bad tarification, gold will not come there, and it will keep the more inconvenient circulation of silver much longer, and the individual interest of the state would incline it to receive gold, but there would be no international interest.

The PRESIDENT replied that an international money ought to have the qualities required for a serious circulation; it must circulate in the country; the advantage of internationality does not guarantee it.

M. PARIEU, referring to M. Feer Herzog's observation on equations of gold and silver coins, said it is not necessary to have a fixed relation,

for, in the example quoted, four thalers equaling fifteen francs, the equation embraces the idea of the existence of a relation of 15.30. It would be the same in the states of south Germany if seven florins were equal to four thalers or fifteen francs. But it would not be so with Holland, where the florin is not so easily equalized, and for which a relation would have to be established.

M. FEER HERZOG did not mean what M. Parieu thinks. He meant that in giving a legal circulation to the fifteen-franc piece at four thalers, the two-thaler gold and silver pieces, the one of 3.754, the other 3.71, must have the same value in the interior, and then the equation would be established between the gold and silver coins, although the treaty only established the equation between gold coins.

The PRESIDENT. If an agreement were made with Prussia that fifteen francs should be worth four thalers, it would be introducing the international standard, and its silver thaler would not be altered, as it would be rated at 15.30. The circulation of gold would no longer be prohibited, and no doubt would become of great importance. So in Bavaria, if the fifteen-franc gold piece circulated there for seven florins, it would be the same as fixing a relation.

M. LAVENAY thought it is not of international interest to fix a minimum of relation between the two metals. What would be the use of it? It would only be introducing gold in circulation in the silver standard states. But if a legal circulation is given to gold in those states, that metal will assume the ascendency, and silver will have to circulate at its market value.

On such conditions, those states would soon discover that the best way to bring gold into circulation would be to treat it more favorably. As gold is more portable and convenient for money, it is the interest of nations to encourage its circulation both at home and abroad.

The PRESIDENT doubted if it is the interest of every state to encourage the circulation of gold within its limits. Holland, for instance, though its standard is different from that of its neighbors, and its currency is different from all its neighbors, yet has a flourishing commerce, and its prosperity may continue a long time yet.

M. JACOBI thought with M. Lavenay that the best way to get a money for general circulation, is to leave each state to settle the relation between the two metals. There would certainly be great differences at first, but particular tariffs would soon give way to a general tariff.

The PRESIDENT said it is not necessary to have a complete tariff now, but only to fix a minimum for the relation.

Mr. STAS observed that different meanings are given to the word *equation* in this debate, and he thought that in voting affirmately on question three, in which the conference has decided to fix the relation at 1 to 15½, that relation ought to serve as a basis for equations.

The PRESIDENT said the affirmative vote on question three did not carry with it the idea of equation between gold and silver coins, but

only between the different gold coins, and then the vote was only on partial coincidences, and not on equations. It has moreover been decided that the double standard was necessary for silver standard countries as a medium of transition to reach the gold standard. Now as the relation between the two metals is different in different countries, and as gold comes in more readily when the coefficient of silver is higher, ought not a minimum to be fixed if gold is wished to be introduced? It would be vain to decide upon an international money without fixing a relation for it with the silver money in states where the double standard was transitory. There must be some system in circulation of coin to make it permanent. The Holland ducat, so useful in travelling, only disappeared because it had no fixed relation with silver in any country, and so its existence was ephemeral. This must not be the case with the new international money.

Mr. HAINDL thought the greatest difficulty for states having the double standard, or that are to have it temporarily, would be to find the exact proportion between gold and silver during the period of transition. Steps would have to be taken for one metal to drive out the other, but care should be taken not to cause a crisis by driving out silver too suddenly. These steps can be taken only at the moment of operation, so that no limited minimum could now be fixed. If the relation is 15.19 in Holland, as M. Mees says it is, it is 15.58 in Germany at present. So each state must be left to fix that relation, which would offer no danger, as its object would be to draw gold into circulation and join the monetary union proposed by the conference as soon as silver disappeared from circulation.

M. BROCH agreed with M. Parieu that a limited minimum is necessary for the transition period. Without such a provision, gold could not be introduced into a country that had fixed a limit too low. Thus there may be a doubt about the equation of fifteen francs to four thalers, permitting gold to enter Prussia, as four thalers would have an intrinsic value below three pieces of five francs each.

The PRESIDENT observed that within the limits of states, sentiments wholly apart from economy often have an influence on opinions in money matters. A reform of this kind encounters certain ideas of routine against it, certain exaggerated fears of any innovation, a singular love for certain coins. Therefore the conference should endeavor to establish rules to realize, as far as possible, the desires it has expressed in favor of the gold standard.

M. MEINECKE said that as question seven is in respect to transient measures, which he cannot discuss, he and his colleague must refrain from voting.

M. VROLIK, though he agreed with M. Parieu, thought with M. Lavenay, that it is better in practice to leave each state to fix its own relations. An average in exchange would soon be established between the two metals by the force of circumstances alone.

In Holland, the Napoleon would be received at 9 florins 35, which, as M. Fortamps observes, would give a relation of 15.19. Germany, as well as Holland, could receive the 15-franc pieces at 4 thalers, or 7 Bavarian florins. The 15-franc piece would then have a great circulation; it would be the connecting point between the German and French monetary systems. On the contrary, if a limited minimum relation of 15.25 or 15.30 were admitted, as M. Parieu proposes, it would be creating difficulties to a monetary unity, it is therefore better to fix nothing.

Baron DE HOCK, with Messrs. Lavenay, Meinecke, Haindl, Mees, and Vrolik, thought article seven might be passed over. Though he agreed with M. Parieu in having some principle for transitory measures, he thought it difficult to fix a limited minimum relation between the two metals for the States with the silver standard. In his opinion, that would depend entirely upon their value at the time of the international conventions. In fact, if it is remarked that gold has continued to decrease in value for the last dozen years; that during the next two years it rose; we may ask if it will continue to rise, or will fall again?

This would cause serious discussion. Some men think gold will continue to rise, because its extraction is daily becoming more expensive, and because of its great dispersion by its introduction into the monetary system of India. Among others, Mr. Soetbeer, of Hamburg, whose writings have given him a name in Germany, thinks gold has an abnormal circulation now, and that it must fall in future.

In presence of such different opinions it is difficult to fix a limited minimum of relation that would satisfy the aims of the conference. Perhaps it is better to adhere to a certain generality, and for that reason M. Hock proposed this substitute for article seven:

"The advantage of internationality which coins would acquire from the metal adopted as a common standard would not be a sufficient guarantee for keeping them in circulation in each state, but it would be necessary to stipulate also, in countries that have had the silver standard up to this time, as well as in those of the double standard, that the relation between the value of gold and silver should not be established at a rate too low to permit the serious introduction of gold."

The PRESIDENT said he would willingly adopt M. Hock's proposal for countries of a silver standard, but he doubted if it would suit countries with the double standard. The last have long had a legal relation between gold and silver, and it would be difficult to suppose they would modify their metallic relations on adopting the gold standard, so as to drive gold out of circulation.

What M. de Hock's amendment contains, referring to countries of a double standard, might then be rescinded without inconvenience. The present debate is not on a minimum relation but upon M. de Hock's general proposal, that can be voted for affirmatively by the members of the conference who have not contrary instructions from their governments, without settling the question of a minimum.

M. HERBET remarked that the question will come up in the special conventions, and can then be decided by the delegates that are qualified to do so.

On invitation of the president, M. FORTAMPS said, in his private opinion, a minimum relation less than 15.40 ought not to be adopted.

The PRESIDENT is disposed to put Baron Hock's proposition to vote.

Mr. RUGGLES asks that the vote be postponed till the next sitting, because he does not clearly see the effect of the amendment.

The PRESIDENT proposed to put the question to vote, and remarked that those members not prepared for the proposition, as Mr. Ruggles, who seems, however, to be alone, can withhold their vote at present and give their adhesion or refusal some other time.

M. KERN thought the debate has been long enough to give every member of the conference sufficient time to form an opinion, and says, he is not disposed to go further than Baron de Hock. When such important and diverse interests are at stake, long reflection is necessary before a positive decision can be rendered. Baron de Hock's proposition is less binding in its general terms than if it was made out in figures, as M. Parieu's primitive idea was. It is a happy compromise of diverging opinions tending to the same end, and differing only in comprehensiveness. The vote, then, should not be deferred, as no better solution could be reached in all probability. For the good of the conference the vote ought to take place immediately.

Mr. RUGGLES excused himself from voting because he does not understand the question. The United States would not consent to accept any fixed relation between gold and silver. The double standard is abolished when this relation no longer exists.

The PRESIDENT reminded Mr. Ruggles that the double standard still exists in the United States, and of course the relation between silver and gold, which is 1 to 16.

Mr. RUGGLES answered that though the double standard still exists legislatively in the United States, it is virtually abolished in practice, and hence the United States has the gold standard alone.

The PRESIDENT. Reasoning in that way, as France coins a less number of five-franc pieces than America does dollars, we might say, like Mr. Ruggles, that France has the gold standard alone, and that is what nobody would assert.

M. JACOBI remarked that the United States cannot be considered as having the single gold standard any more than France, unless a new law is passed to prohibit the coinage of silver dollars.

M. FORTAMPS regretted that the vote is not to fix a limited minimum of tariff, and says no country with the gold standard can be forced to admit a tariff of silver coins of other countries where the silver standard is preserved.

M. de Hock's proposal was put to vote and adopted unanimously, except by Prussia, the member from that country declaring that he

cannot vote, and the member from the United States deferring his vote.

M. de Hock's proposition having been adopted, question seven was expunged, and would not be voted on.

The discussion of article eight was deferred till the next meeting, fixed for Saturday, at ten o'clock.

The sitting adjourned at half past twelve o'clock, noon.

INTERNATIONAL MONETARY CONFERENCE.—FIFTH SITTING.

WEDNESDAY, *June* 26, 1867.

Prince NAPOLEON (JEROME) presiding. Present, the delegates that attended the last meeting, and M. Delyannis, with the exception of M. Mees, who went to Amsterdam on urgent business, and could no longer take part in the labors of the conference, to his great regret.

In consequence of a report presented to the Emperor by the minister of foreign affairs, published in the Moniteur of the 26th June, his Majesty entrusted the presidency of the commission to his Highness Prince NAPOLEON, who opened the sitting with these words:

"Gentlemen: Appointed by the Emperor to preside over the International Conference for the unification of moneys, I have gladly accepted the mission. It is not becoming for me to say why I have received this appointment; the reason is kindly given in the report of the minister of foreign affairs. But I assure you it would be a vain presumption in me to think that I could bring much knowledge or furnish much information upon the subject in question, to an assembly of men so eminent as yourselves.

"I feel my incompetency, particularly after the wise direction that my friend and colleague M. De Parieu has given to your labors; and I hope he will aid me with his counsel and advice. I am aware of the difficulty I shall have in interpreting our good intentions by practical results; and the reading of the minutes of your sittings has proved to me how much you are moved by the spirit of conciliation so necessary to arrive at a monetary unity, which is the desire of all, and the great and many difficulties of all kinds that we shall have to encounter in our labors. But the greater the difficulties, so much greater the glory for the governments here represented. You all know the intelligence of public opinion in the present age, how prompt and exacting it is in its ardor; and we must endeavor to gratify it without disguising the obstacles we shall have to surmount.

"I beg you, therefore, gentlemen, to keep constantly before your eyes the object we are pursuing. Let us remember that the public expects a result from our conference, and let us show why many former committees and conferences were unsuccessful. Let us so act that our assembly may not result in a fine report alone, or a good argument in favor of the unity of moneys; but let it end in a useful result.

"Let us continue our labors so well begun. I think this is the proper order for our deliberations: We will continue the discussion of the numbered questions; when that is done I will state what I think the best way, in a general or particular manner, for each state to "hasten the period of germination for the seeds you have sown," as M. de Parieu has justly and eloquently expressed it.

"I bring you all that I can, which is an energetic good will and a strong desire to effect a monetary unity. Allow me, gentlemen, to rely upon your kind assistance."

M. DE PARIEU replied to this speech of his imperial highness, for himself and the conference, in the following terms:

"Monseigneur: It is a great gratification to me to be the interpreter of the conference, by expressing the sentiments we all feel at the honor conferred upon this assembly by the presidency of your imperial highness. Permit us to hope that this honor will carry strength with it. Your financial knowledge, and the experience derived from your extensive travels, will serve to guide you in the direction of our arduous deliberations.

"Your imperial highness approves of the progress we have already made, and that approbation is of value to us all, and to me especially.

"Allow me to congratulate you, monseigneur, on the sympathy which you have just expressed for progressive ideas. The pursuit of useful innovations, over obstacles and through necessary delays, is a school of patience and justice; and it is also a career of honor worth entering, and in which we will march together at your side."

After this response of M. Parieu, in which all the members of the conference concurred, Count d'Avila submitted two propositions to his colleagues:

1st. The conference will express its profound gratitude to the Emperor for the honor he has conferred by appointing his imperial highness Prince Napoleon to preside over it. The address will be presented to the Emperor by a deputation from the conference, or, if there is no objection, by the entire conference.

2d. The conference will give a vote of thanks to M. Parieu, its vice-president, for the able and impartial manner in which he presided over their former sittings.

These propositions received the approval of the entire conference, and the first, relating to his imperial highness, was sent to the vice-president for transmission.

His Imperial Highness then handed a letter from his excellency Djemil Pacha to the conference, excusing himself for not attending, on account of the Sultan's arrival.

The minutes of the third and fourth sittings were read and adopted.

M. DELYANNIS regretted that he could not attend the last meeting. He said that he can vote on principal questions, but not on subordinate ones, as his government has adopted the system of the convention of

1865. Not being authorized to vote up to this time, he thinks it his duty to make reservations upon some points settled by the conference.

His Imperial Highness opened the discussion for question eight:

"Is it necessary for the success of monetary unity, to constitute a unity at present, identical everywhere in metallic composition, weight, and denomination; and, in this case, what bases are to be assigned to it?

"Or is it sufficient to constitute common types, having a common denominator of medium amount, as multiples of five-francs for the gold coins?"

Mr. RIVERS WILSON read the following declaration:

"Before recommencing the discussion of the list of questions, the English delegates deem it their duty to the government they represent, to the members of the conference, and particularly to the government of the Emperor, by whose invitation they are present, and to prevent any misunderstanding, to indicate their delicate and exceptional situation. They are convinced of the necessity of this declaration from the serious and practical turn the discussion has borne to this time, and particularly from the high signification that must attach in public opinion to the presidency of his imperial highness Prince Napoleon, and to the labors that must result from it.

"The English government was obliged to accept the cordial invitation from the government of the Emperor to participate in this conference, because a refusal would have shown a want of courtesy, and would have made it liable to accusations of prejudices upon this very important question.

"Indeed, the English nation is in a position much more independent upon this question than most continental nations.

"So long as public opinion has not decided in favor of a change of the present system, which offers no serious inconveniences, either in wholesale or retail trade, and until it shall be incontestably demonstrated that a new system offers advantages sufficiently commanding to justify the abandonment of that which is approved by experience and rooted in the habits of the people, the English government could not believe it to be its duty to take the initiative in assimilating its coinage with those of the countries of the continent.

"But the English government will be always ready to aid any attempt to enlighten and guide public opinion in the appreciation of the question, and facilitate the discussion of the means by which such an assimilation, so advantageous in theory, may be effected.

"Thus, while consenting to be represented in this conference, the English government has found it necessary to place the most careful restrictions upon its delegates; their part is simply to listen to the different arguments, to study the situation as developed in discussion, and to report to their government. Thus far they have found no difficulty in voting in favor of all the propositions adopted by the conference, be-

cause their principles agreed with the system now in force in England. But they cannot vote for any question tending to bind their government, or express any opinion to induce the belief that Great Britain would adopt the convention of 1865."

M. HERBET informs the conference that the reserves just mentioned by Mr. Rivers Wilson are found in Lord Stanley's despatch to the French ambassador in London, announcing participation of England in the monetary conference.

His IMPERIAL HIGHNESS expressed the opinion that the labors of the conference are essentially theoretical; that practical results must be effected in future international conventions, and therefore the English delegates need not fear to express their opinion on any question, since it cannot bind their government, any more than the opinions of other members.

Mr. MEINECKE thought it not to be necessary for the success of monetary unification to form a unity identical in weight and denomination, nor to constitute common types; a unity of metallic composition is sufficient, with the conversion of the coins of the union, that may vary in the different states, by simple equation.

For instance, let France take its 20-franc piece, and Austria its 10-florin piece for union money; then the 20-franc piece would pass in Austria for 8 florins, and the 10-florin piece in France for 25 francs.

Each state might be left to subdivide its union money as it pleased, according to the needs and customs of its people. For example, Austria might coin 5-florin pieces, equivalent to 12½ francs, that France would not be obliged to receive in its public banks, yet this small change ought to be of the same metallic composition as the larger principal coins.

M. MEINECKE thinks that crowns coined by the treaty of 1857, and gold coins by the convention of 1865, of the standard of nine-tenths fineness, would be the best form for this currency. But he cannot say what union money would be best suited for Prussia. What he has said is only intended as a principle. For these reasons he can only approve of the part of question eight that concerns the unity of metallic composition, which he would like to see fixed at nine-tenths fineness. He would vote against the other parts of that question, and could not vote at all on question nine.

His IMPERIAL HIGHNESS pointed out the importance of the question of fineness, to which M. Meinecke alludes, and thought it not expressed with sufficient precision in the list.

M. LAVENAY thought the first part of the question definite enough, but he thought these words should be added to the latter part: "having a common denominator and a similar fineness."

M. HERMANN said Bavaria is bound by the monetary convention of 1857, and cannot accept a currency not received by the Zollverein.

Baron SCHWEIZER said the same of the grand duchy of Baden.

Count D'AVILA thought the principal object of the conference is to prepare for the future, and he had always believed that the convention of 1865 was the best for that purpose; but we should find out the best means to hasten the result. For this purpose it would be well to adopt the gold coins as international money, leaving each state the right to coin its silver in its own way. The gold piece of 5 francs should be adopted as the basis of a monetary unity. The result of this adoption would be to substitute gold for silver in countries where the last is the standard, as in France, where gold is the actual standard, though legislation establishes the double standard.

Though he is not authorized to decide this question, he thinks he can safely say that Portugal would not object to lessen the fineness of its coins from 916 to 900 thousandths; but England would have to set the example. The effect of this would be slight in Portugal, as sovereigns form the chief gold currency there, and the Portuguese gold coins being few, their recoinage would not cost much, particularly as the diminution would offer a compensation.

Count D'AVILA added that he was not aware of the difficulties in a change of system for the English currency, but in theory it does not explain the reserve of the delegates from Great Britain. In theory it would be necessary to change the sovereign, as the United States intend to change their dollar, and in case England followed the example of the United States, Portugal would naturally come in next, particularly as the pound sterling is a legal tender there.

His IMPERIAL HIGHNESS thought that all the members of the conference should agree first upon the fineness of the international coins, and afterwards discuss the monetary unity on the concordance of coins among themselves. For, even if the sovereign were reduced to 25 francs, the English piece would not be equivalent to the French, on account of the difference in alloy.

Count D'AVILA observed that the question has already been discussed in another assembly, where it was thought that England would agree to an equation between the sovereign and the 25-franc piece. The fineness of nine-tenths, the most common in Europe, ought to be adopted; but England must modify the alloy of the sovereign, or at least allow it to circulate for a time as 25 francs, without altering its fineness.

M. DE LAVENAY thought the question of fineness of minor importance to England, as the sovereign might contain just as much gold as the French 25-franc piece. The weight would not be the same, as the quantity of copper would be different for the same amount of gold, as nine-tenths to eleven-twelfths.

The chief obstacle would be the intrinsic value of the piece, as that would be reduced, and it might cause a commotion among the people. But if England, inspired by the ideas thrown out by Mr. Ruggles on behalf of the United States, would consent to this recoinage, it would have the same interest in nine-tenths as in eleven-twelfths, with differ-

ence of weight and alloy. Why, then, should not nine-tenths be adopted? Unity of fineness has in fact an international value, for if all coins were of the same fineness nothing would be easier than to ascertain their intrinsic value. The two different pièces would be equal in weight as well as in fineness, thus furnishing a test of value in everybody's reach. If, on the contrary, unity of alloy is rejected, their weight would be dissimilar and the test destroyed. Therefore, a gold coin having the same fineness and denominator should be adopted, and the second paragraph of article eight could be modified to suit it.

M. LAVENAY apprehended that the English delegates exaggerate the powers of the other commissioners. The business of the conference is to find out the best way, in theory, to provide for a monetary unity, but no member binds his government by his acts. As the English delegates are in the same position, they should not refuse to enlighten the conference with their experience, but should give their opinions freely in the debate on succeeding questions.

Baron SODEN, of Würtemberg, agreed with the representative of Bavaria and the North Confederation, and felt the necessity of a change in the monetary system of Würtemberg and south Germany. For that reason the proposal of France for a conference to assimilate the different monetary systems was gladly accepted in Würtemberg. But, as the Monetary and Customs Union bind Germany together by reciprocal duties, the decisions of this conference ought to leave the German states at full liberty to act in concert. Their unanimous agreement to adopt the gold standard led us to hope there will be no difficulty in the adoption of an international currency when the question of an international treaty comes up in the convention.

With these reservations Baron Soden approved of the declarations made by the delegates from Prussia and Bavaria.

Baron DE HOCK thought that when the conference adopted the French monetary system as a centre for the proposed unification, it thereby settled the fineness at nine-tenths, and therefore there was no occasion for a new discussion of that point. He thought, with M. de Lavenay, that the question of unity of fineness is of great importance. In fact, without identity of fineness monetary unification is impossible, because identity of value cannot then be ascertained by weight; and as it is impossible to coin pieces of exactly the same weight and alloy, which gave rise to limits of tolerance, how can one know when these limits of tolerance are exceeded?

M. FEER HERZOG disagreed with Baron de Hock in thinking that the adoption of the French system implies an adoption of its alloy. The system was merely suggested as a basis of unification, with the modifications the conference might choose to introduce; but, personally, he thought nine-tenths the best alloy. He said the convention of 1865 is too often called up in discussion; nothing in that is binding on us. The duty of this conference is more extensive; it not only has to study the

international merits of the convention of 1865, but has to fix a basis for monetary unification. The frequent mention of that convention has misled the English delegates and induced them to declare they could not vote for its adoption by Great Britain. The resolutions of this conference do not adopt the convention of 1865, they only seek through its proceedings a better solution of the monetary question. With this understanding the delegates can express their personal opinions without speaking for their governments, and it is to be regretted that M. Meinecke has shown so much reserve in speaking of the mark of Cologne and Stuttgard in this discussion of a monetary unity.

Count D'AVILA remarked that he did not mean that fineness was a secondary consideration, as M. De Lavenay supposes; he merely meant that France and England might agree in bringing the sovereign down in value to the 25-franc piece without altering its fineness. The simple question is whether England would give the sovereign a legal circulation at 25 francs with its actual alloy, or reduce it to nine-tenths by melting. Contrary to M. Feer Herzog, he thought the convention of 1865 ought to be adopted as a practical basis in discussion. He did not propose its complete adoption, but only in reference to gold coins, without alluding to silver or copper currency.

Mr. DE PARIEU thought that the question of fineness, though important, may be considered as secondary; the chief point is identity of fineness in the coins. The banks could distinguish the differences of fineness in case of necessity, and a sufficient medium of control might be arrived at to ascertain the value of coins in circulation without resort to single weight. If the English pound sterling contained the same quantity of fine gold as the French 25-franc gold piece, an understanding could be easily arrived at. The superior fineness of the sovereign is rather in its favor; for, if reduced to nine-tenths fine, the additional copper alloy would increase its weight, and thus compensate for its loss in gold. But the chief difficulty might be the modification of contracts and the conversion of debts if the sovereign were thus reduced.

According to Baron de Hock the question had been already settled by adopting the first question. Though this is not exactly the fact, yet the question is predecided by admitting the advantages of the money of the convention of 1865, in a metric and decimal point of view, for the alloy of nine-tenths offers this decimal character by itself. The members of the conference are therefore almost agreed upon question eight, particularly if these words were expunged from the second part, "for instance, by multiples of 5 francs," that decide beforehand the common denominator of the international coins.

All the delegates are of opinion that a common denominator ought to be fixed upon for all gold coins of certain importance. In neglecting this last condition, we might say that denominator exists already; thus a common denominator of one-tenth is found for the sovereign, rated at 25 francs 20 centimes, and the Napoleon. But we do not want such a

small denominator for the reciprocal conversion of monetary values. That of 2 francs 50 centimes, proposed by M. Meinecke, is even too small; for the comparison between the pieces of 10 francs, 12 francs 50 centimes, and 7 francs 50 centimes, would be very difficult.

In the material fabrication of these gold coins there should be a minimum difference of 5 francs, so as to make an apparent distinction in the form of these pieces. Such was M. Pelouze's opinion. He thought the coinage of a 25-franc piece very practicable, because it would differ greatly in size from the Napoleon of 20 francs.

In a scientific point of view, the delegates might therefore negative the first paragraph of question eight, and affirm the second paragraph modified by M. Lavenay's proposition, in discussing the utility of common types "for the weight and fineness of the gold coin."

M. ESCHER considered the question of similar fineness for the international coins as of great importance. Without this unity it would be very difficult to ascertain the true value of the pieces. It is their weight that gives the measure of their value. We must, therefore, have a unity of fineness, and the best for that is nine-tenths, on account of its decimal character. In a metrical point of view it would have been better if the convention of 1865 had adopted the fineness of eight-tenths instead of $\frac{835}{1000}$ for the small coins.

M. STAS hoped that his single vote for an entire new system at the beginning of the conference, as offering the best chances for a monetary unity, will not influence his present observations on question eight. He thought with Baron de Hock that the adoption of the first question implies an adoption of the French system, and that it is indispensable for its monetary types. Unity of fineness must be admitted, because the real value of a piece is most conveniently ascertained by weighing it. Nobody has a true test always about him to ascertain whether his money is of a fineness within the limits of tolerance. The fineness of all coins must therefore be similar, and they must be of the metrical system.

The fineness of nine-tenths has this quality, and its prevalence in France, Italy, Germany, and the United States recommends it to those countries that have preserved the fineness of $\frac{11}{12}$, like England and Portugal.

After the question of fineness comes the common denominator, as 5 francs. The multiples of 5 francs would be 10, 15, 20, 25 francs, the correlative coinage of which would be very difficult. For instance, in the present pieces of 5, 10, and 20 francs, the diameters are 17, 19, and 21 millimetres. Now, if a 15-franc piece is coined, its diameter must be between 19 and 21 millimetres; and there would be but one millimetre difference between the pieces. It would be very easy to mistake these coins, particularly when we see 10 and 20 franc pieces, so often mistaken. Why, then, make a piece between them in size?

M. STAS did not hesitate to say, that in presence of so many practical

difficulties, besides the inconvenience of a system with so many gold coins, it would be necessary to raise the common denominator from 5 to 10 francs, and supply the 5-franc gold piece, which is so inconvenient it is often refused in Belgium, by an alloyed silver piece of the same value.

He thought Austria was wrong to make a 10-florin and 4-florin piece, of 25 and 10 francs, because 10 has to be divided by 4, which makes a system essentially defective in a scientific point of view. On the whole, he was for unity of fineness, and thought it ought to be nine-tenths, with the lowest types of 10 and 20 francs. The 5-franc piece should be alloyed with silver, so as to make it more convenient in size, and no 15 or 25 franc pieces should be struck, because they are not scientific, and their practical utility is uncertain.

M. HAINDL, as director of a mint, protested against Baron de Hock's interpretation of the limits of tolerance. Certain tolerances are agreed upon, not to lessen pieces in weight and fineness, as Baron de Hock says, but solely on account of the impossibility of giving the exact weight and fineness that the coins ought to have. The tolerances above and below ought to compensate for the general wear on all coins.

M. JACOBI remarked that the question of tolerance explains itself. He thought a common fineness and tolerance should be adopted in coining the pieces. He said the second paragraph of question eight is not properly worded, and the labors of the conference will be vain, unless identity of weight and fineness is inserted in the first line.

His IMPERIAL HIGHNESS, in answer to M. Jacobi and other members, proposed to substitute the following phrase for the paragraph in question:

"Is it necessary to constitute common types for the weight and fineness of gold coin?"

This new formula is open to debate.

Baron DE HOCK preferred the original form; as the last mingles two distinct questions, namely, of weight and fineness. It is probable that all the members of the conference will vote for identity of fineness, and few for correlative identity in weight; for, with this double identity of weight and fineness, identical coins are produced, and there would be no need to establish partial coincidences between the coins of different countries, as mentioned in the first question.

Baron DE HOCK favored common types with identity of fineness, but opposed identity of weights, as that would cause identity of coins. M. Parieu's wording, where the two elements are distinct, is therefore preferable.

As to common types, it would be best to let each state make its own gold coins as it chose, provided it had one gold piece in common with the others. The same distinction might be made in these coins as in the union coins and territorial money of the convention of 1865.

Baron DE HOCK concluded by referring to Mr. Haindl's remarks, cer-

tainly caused by a misunderstanding, as he regarded the question of tolerance precisely in the same light as his honorable colleague.

M. MEINECKE did not think it necessary to adopt an identical coin, but that a distinct concordant coin would be sufficient. It would be best to divide the question as proposed by his Imperial Highness, as he would vote for identity of fineness, even at nine-tenths but against identity of weight. He did not know if the 4-thaler piece, so often mentioned in this discussion, could be struck in Prussia.

M. JACOBI thought that the adoption of coins of different weight and fineness, but equal in value, would remove present difficulties, and the money would be carried inland.

On the contrary, would not identity of fineness without identity of weight force each state to recoin all foreign money that comes in, as is the case at present? Therefore identity of weight and fineness ought to be adopted.

M. VROLIK thought weight and fineness go together and ought not to be separated, so there is no cause to divide the question put by his Imperial Highness. What ought to be the common denominator of the common types, the 5 or 10 franc piece? M. Vrolik preferred the 5-franc piece, because he believed in the necessity of the 15-franc piece for Prussia, south Germany, and Holland, which would certainly circulate extensively in central Europe. As M. Stas says, this 15-franc piece might be mistaken sometimes for the 20 or 30 franc piece, but to reach a monetary uniformity we must overlook some difficulties.

His IMPERIAL HIGHNESS thought the difficulty of fabrication not insurmountable, and the difference of 5 francs could easily be perceived. So thought M. Pelouze. The 15-franc piece might, therefore, be coined.

Mr. RUGGLES considered unity of fineness as essential. He will vote for the question as put by his Imperial Highness because the United States desire unification of fineness and weight.

M. ARTOM was of opinion that, as the conference is agreed upon identity of fineness, that part of the question might be voted on separately.

M. DE LAVENAY said, by identity of weight is meant correlative weight, and the adoption of the question as proposed does not force the adoption of identical coins. A piece of 15 francs and one of 10 francs, both of nine-tenths, have correlative weights. Identity of weight is the present question.

His IMPERIAL HIGHNESS said there can be no international money without identity of fineness and weight. There is no necessity, then, to modify the first paragraph of article 8 as it now reads, namely:

"Is it necessary to constitute common types in weight and fineness for gold coins?"

M. WALLENBERG thought that as the conference is agreed on identity of title, that part of the question ought to be put to vote. He asked that the standard be fixed at nine-tenths, as Sweden has agreed, after

many essays, that it is the best. These experiments were made when the metrical system was first attempted to be introduced, and which failed on account of the opposition of the clergy and country people.

His IMPERIAL HIGHNESS thought it best not to fix a fineness at present, till the vote becomes unanimous.

M. DE PARIEU said there is no absolute necessity for agreement of weights and fineness. For instance, an assimilation might be effected between the French monetary system and the English, if the sovereign were reduced to 25 francs, and it would not be necessary to reduce the fineness for that purpose. It would be a great advance without identity of weight and fineness.

On the other hand, there might be types of a common denominator without identity; for example, if the English should reduce their sovereign to 25 francs without our striking any coins of that value.

His IMPERIAL HIGHNESS said that would not be an international coin.

M. DE PARIEU replied that international money does not mean identical coins, but coins easily changed. Thus, the simple relation of 20 francs and 25 francs would constitute a sort of international community of a certain utility.

M. STAS was of opinion that, with equal value, weight is inseparable from fineness.

M. JACOBI agreed with M. Parieu. He thought unity will remain ideal in certain states, but that is of no importance; it is sufficient for coins to have simple relations.

Baron DE HOCK, who advocated common coins, admitted identity of fineness and identity of weight in coins of the same value. He would also like to see identity of diameter in these equal value coins. Yet to decide this more easily, he thought the two parts of the question should be voted on separately. One of the two might be decided unanimously.

HIS IMPERIAL HIGHNESS proposed M. de Parieu's reading in two forms:

"Should there be types with a common denominator for the weight and fineness in gold coins?" Or this:

"Should there be types with a common denominator for weight in gold coins of identical fineness?"

M. KERN seconded M. Parieu's motion for the term denominator, which may be theoretical, without obligation of coinage.

Several members expressed their preference for M. de Parieu's second reading, and his Imperial Highness put it to the vote. It was unanimously adopted.

His IMPERIAL HIGHNESS also proposed to vote on the question of international fineness, and suggests nine-tenths, which was unanimously adopted.

Mr. GRAHAM said he voted for nine tenths only in case of an eventual recoinage.

His IMPERIAL HIGHNESS then put the question of a common denominator; but at the request of several members, the discussion was put off till the next sitting, which was fixed for Friday, 28th June, at 9 o'clock a. m.

The sitting closed at a quarter to one o'clock.

NAPOLEON, (JEROME,)
Prince President of the Conference.

CLAVERY, *Secretary of the Conference.*
ROUX, *Secretary Adjunct.*

INTERNATIONAL MONETARY CONFERENCE—SIXTH SITTING.

FRIDAY, *June* 28, 1867.

Prince Napoleon presiding. The sitting opened at 9 o'clock. Present, the delegates that attended the preceding meeting, except M. Fortamps, who was obliged to return to Brussels.

His IMPERIAL HIGHNESS announced that Señor José Polo, the representative of Spain in the conference, had to attend the Cortes in Madrid, and the Spanish government had appointed Count Nava de Tajo, subdirector in the department of foreign affairs, to take his place.

Count Nava de Tajo immediately took his place among the members of the conference.

The minutes of the fifth sitting were read and adopted.

His IMPERIAL HIGHNESS remarked that the conference adopted the first paragraph of question eight at the last meeting, under this form:

"Should there be types with a common denominator for weight in gold coins of identical fineness?"

The conference also adopted the fineness of nine-tenths.

Now it remains to fix a common denominator, as expressed in paragraph second of question eight, in these terms:

"What should be the common denominator? Must it be 5 francs?"

The debate being opened, M. de LAVENAY advocated the advantages of the 5-franc piece as a common denominator. With its multiples it coincides with many other coins; it nearly corresponds to the dollar and the sovereign; and it exists in the convention of 1865. The United States are ready to adopt it, and cannot make use of a higher unit without modifying their entire system.

In some countries, as in Belgium, as M. Stas remarks, if the mould or die of 5 francs is thought to be too small for convenient coinage and ready circulation, those states might be dispensed from coining it.

His IMPERIAL HIGHNESS said, Mr. Leone Levi declared at the conference instituted by the committee of weight, measures, and coins at the Universal Exposition, over which he presided yesterday, that the 10-franc piece, divisible into 100 pence, would be preferred in England.

Mr. WILSON, speaking for Mr. Graham, says, in his private opinion

the 10-franc piece would have the advantage over 5 francs by giving a higher unity, which would be desirable for England in offering a more simple relation with the ordinary system of the franc.

Count D'AVILA would vote for 5 francs as a denominator, and agreed with M. de Lavenay that certain states may not be obliged to coin it, but they must receive it.

M. STAS insisted that the 5-franc gold piece is too small for convenient coinage, and that it must be enlarged by silver alloy.

M. DUTILLEUL said that in France the 5-franc gold piece is even yet a coin met only in cities, and but very little in the country.

Count D'AVILA adduced the example of Portugal, Spain, and the United States, where there is no complaint of the milreis, the 20 real, and the one dollar piece, all which approximate the 5 francs of the monetary union of 1865.

M. WALLENBERG repeated what he said on a former occasion in regard to the adoption of the denominator of the 10-franc piece, which agrees perfectly with the decimal system, whereas the 5-franc gold piece neither agrees with the decimal system nor with the system of the franc; 5 francs divided by 100 leaves the 5-centime piece entirely too small, while the 10-franc piece divided by 1,000 gives the centime, forming a good subdivision to the last degree of the monetary scale. He said it should be decided that all the states should coin the 10-franc piece, but be left at liberty to coin whatever other pieces they might choose. The United States might coin 2-dollar pieces; that would be much more convenient than the 1-dollar piece.

M. HERBET did not agree with M. Stas in thinking the Belgians so much opposed to the 5-franc gold piece.

Baron D'HOCK favored the 5-franc common denominator, as the lowest possible to be convenient.

M. VROLIK also preferred it, as it will allow the coinage of 15-franc pieces, and will suit the silver standard countries that have the thaler and florin.

M. MEINECKE could not say at present what gold coin would be best suited to Prussia and the German states, if they hereafter decide to change the silver for the gold standard; nor could he say that they would readily adopt any coin easily convertible into French gold pieces, as it might be against the interests and opinions of the people. They might adopt the crown of the convention of 1857, nine of which contain 310 francs in gold.

M. MEINECKE gave these reasons for not voting on the question of a denominator.

M. JACOBI approved of adopting the 5-franc piece as a denominator, but inquired why a 5-franc platina piece could not be coined with a weight of 5 grams, or 1,000 francs, per kilogram. This was suggested by M. Stas's remarks.

His IMPERIAL HIGHNESS replied that the platina would have to be

purchased from Russia, in the first place, and moreover that the experiments that have already been tried have failed. In any event, the platina piece would be considered as "*billon*," and the conference is not concerned with that particular kind of coinage.

M. JACOBI replied that platina could be coined now under more favorable circumstances than formerly, considering the improved treatment of that metal, thanks to the labors of Messrs. Henri, Saint Clair Deville, and Debray. He adds that Russia is not the only country where that metal has been found; it has been discovered in considerable quantities in various parts of South America.

M. FEER HERZOG was surprised at M. Stas's objections to the 5-franc gold piece; it passes readily in Switzerland, it represents the piastre of many countries, which was the universal currency for a long time, and when brought into America by the Spaniards gave rise to the dollar.

M. Jacobi's suggestion could not be adopted, as it would be dangerous to introduce a new metal, and platinum is too hard to take the place of gold and silver for money.

M. JACOBI replies that from his own experiments and others platina is easily coined, and is predestined by its nature to become the universal metal for money, when it shall be found in sufficient abundance.

Mr. RUGGLES said the gold dollar, notwithstanding its dimensions, is well liked in the United States.

His IMPERIAL HIGHNESS proposed to put to vote the second paragraph of the new question, eight, by adding to 5 francs the words, *or its multiples*, so as to allow Sweden to vote in the affirmative.

M. ARTOM thought the reduction too great, as there should be but one common denominator.

Mr. GRAHAM remarked that if 5 francs is adopted as a denominator, all accounts in England must be kept in dollars.

M. DE PARIEU thought the denominator should be certain; he proposed to vote on 5 francs as a denominator, leaving out "*or its multiples*," because a single figure is best for a denominator.

His IMPERIAL HIGHNESS put the question to vote, and it was adopted by 13 to 2. England and Sweden voted no; Prussia, Bavaria, the grand duchy of Baden, Wurtemberg, and Belgium did not vote.

The ninth question was next opened for discussion:

"In case gold is adopted as the international metal, would it be expedient for the types of the coins determined by the monetary convention of the 23d December, 1865, for the sake of unification and reciprocity, to be completed by new types; for instance, by pieces of 15 and 25 francs? In this case, what should be their dimensions?"

On motion of his Imperial Highness, the second part of the question was left out, because details, such as the dimensions of the coins, would be more properly discussed when the governments shall agree upon executive measures.

Baron DE HOCK thought we should first agree upon common coins, that is, money that would be a legal tender in all the states.

M. DE PARIEU replied that, laying aside the question of legal tender, the proposal of common types has been accepted by the fact of the adoption of the affirmative on the preceding question. With a common denominator, it is evident there will be pieces and common types, practically, if not from absolute necessity. The interest, then, in question nine is reduced to technical explanations on the coinage of 15 and 25 francs solicited by the directors of mints, and the discussion of obstacles to the decimal system.

Viscount VILLA MAIOR thought it sufficient to admit 5, 10, 20, and 25 franc pieces.

Mr. RUGGLES particularly insisted upon the interest felt by the United States in obtaining the consent of France to coin pieces of 25 francs, thereby revising the convention of 1865. The American half-eagle and the English sovereign would readily circulate side by side with the French 25-franc piece, on conditions of perfect equality.

Copies of his written argument, presenting the considerations in favor of the measure, were distributed among the members. This document, containing many statistics, is annexed to the present minutes.

His IMPERIAL HIGHNESS informed Mr. Ruggles that France does not object to his proposition; but the convention of 1865 being in force, the French government must have an understanding with its associates; but that the revision of that diplomatic act, on the point in question, would undoubtedly meet with no difficulty.

M. ARTOM thought the Italian government would not object to receive the 25-franc pieces, provided it was not required to coin them.

M. BROCH wanted the types of the universal coins to be as few as possible. He thought the states should not be required to coin, or even to receive, the 5 and 15 franc pieces. One is too small, and hard to preserve of exact weight, as M. Stas remarks; the other is useless, as it would only suit Germany, where they are disposed to coin the *marc*, twenty of which would equal 25 francs.

Baron SODEN remarked that the 15-franc piece would suit the south German states.

As the differences of opinion seem to be confined to the 15-franc piece, his Imperial Highness proposed to vote first on the adoption of the 25-franc piece.

M. HERMANN, taking up Baron de Hock's proposition, insisted that the conference first vote to know whether only one coin is to have legal currency in all the contracting states.

Baron DE HOCK said, in fact, the conference has not yet declared that the coins of one state should be received by all the others. Without such reciprocal reception there would be no monetary community. After the committee has decided this general question, M. Hermann's might be next examined, namely: "Whether this acceptance is to apply to all the coins of the monetary system, or only to some of them?"

M. DE PARIEU, in reply to Baron de Hock, put this question: "Are

the 5-franc gold coins to be received in the public banks of the states that are bound by the monetary convention?"

M. STAS proposed to substitute the words *legal circulation*, for *received in the public banks*. He said, as the convention of 1865 only contained this last stipulation, the Bank of France, without giving reasons, refused to receive 155,000 francs in Belgian gold. If it feared a surfeit of that kind of money, it might rest quietly, as only 4,800,000 francs in gold have been coined in Belgium since the convention.

M. FEER HERZOG said it is true the contracting states only obliged the public banks to receive the union money in 1865, because they did not wish to force their citizens to accept foreign money; but it was officially declared at that time by the board of directors of the public funds, that when the public banks in France received the union money their example would be followed by all the other large credit establishments.

M. DE PARIEU feared it might cause some trouble in remote localities if the union currency were now made a legal tender among private individuals, instead of only being receivable in public banks. Tax collectors might readily recognize the different dies of the gold pieces with the denominator of 5 francs; but individuals would be puzzled by the foreign effigies on the coins imposed upon them.

M. DE LAVENAY thought that inconvenience might result if small change, with intrinsic value below the nominal, were forced into circulation; but we are now speaking of coins of a real value equal to their legal value.

Mr. RIVERS WILSON had doubts about the words "legal circulation"; he asked what would be the result of a limitation to the amount receivable in payment, as in the case of silver small change?

His IMPERIAL HIGHNESS said the question was not about coins with a limited circulation; he approved of the words "legal circulation," because they mean that the international money must not be refused, and the people will then accept it willingly.

He proposed this new wording: "Shall the gold coins with the common denominator of 5 francs have legal circulation in the states that are mutually bound by the monetary convention?"

On M. Stas's proposition, the word "coins" was substituted in place of the words "the coins," as being more restrictive, and expressing certain coins.

The question thus put was adopted unanimously.

The delegates from England, Prussia, Wurtemberg, and the grand duchy of Baden did not vote.

His IMPERIAL HIGHNESS recalled the discussion of the 25-franc piece.

Mr. RUGGLES wished it to be well understood that the United States particularly desire the adoption of the 25-franc piece as a type.

Mr. GRAHAM thought there should not be so many different pieces. The introduction of the 15 and 25-franc pieces into the French system would be a defect; it would be better to stop at the 20-franc piece. He inquired if France really intended to coin 25-franc pieces.

His IMPERIAL HIGHNESS replied that certainly, if France consulted only its own convenience, she would see no necessity for issuing this new coin; but to facilitate the work of unification, the object of the labors of the conference, it would make the concession requested by the United States. It also appeared that the coinage of the 25-franc piece would equally accommodate both England and Austria.

Count NAVA DE TAJO said that the coin would also accommodate Spain.

M. STAS agreed with Mr. Graham in believing if a new system is not to be adopted we ought to adopt the French system, without change, and not multiply subdivisions.

His IMPERIAL HIGHNESS thought the bases of the convention of 1865 ought to be enlarged, in order to affect assimilations that it has not yet offered the means of realizing.

M. STAS thought the bases of the convention of 1865 were too large already, and that the 5-franc piece ought not to remain in it.

M. JACOBI said if experience shows the 5-franc piece to be too small for convenient circulation, it will soon disappear.

The question on the 25-franc piece being put to vote it was unanimously adopted. Prussia, the grand duchy of Baden, and Wurtemberg abstained from voting.

His IMPERIAL HIGHNESS then proposed the opening of debate on the 15-franc piece.

M. VROLIK insisted on the admission of the 15-franc piece in the universal monetary circulation.

M. DE PARIEU seconded the motion, because he thought it would prove acceptable to many densely populated states.

Baron SODEN answered for Wurtemberg in accepting M. Vrolik's proposition.

Baron DE HOCK thought there was no present necessity for adopting the 15-franc piece, because Holland has not yet come into the monetary union, and the coin in his opinion would be of no use in the German states.

M. VROLIK replied, that without speaking for his government, he indicated the 15-franc piece as a means of inducing a certain number of states to join the monetary union.

M. DE PARIEU did not see why Austria objected to the 15-franc piece when it was demanded by Holland, and suited south Germany. The Austrian commission of April last adopted the 10 and 25-franc pieces. By adding a 15-franc piece to the 10-franc piece, Austria would have the two elements composing the piece of 25 francs in gold.

M. ARTOM demanded that, in any event, it be laid down that the states should be bound to accept the 25-franc piece, but not to coin it.

M. MEINECKE regretted that he could not vote on this question any more than he could on the other; but to come to a decision it will be necessary to know what Prussia wants. Now there is no fixed opin-

ion in that country, but a monetary uniformity is certainly desired. All he can do is to vote for the gold standard, but in minor questions he can take no part. He has no idea of their effect, for he does not know when or how Prussia will pass from the silver to the gold standard. It could not be done now without producing a monetary crisis in Prussia, which is not in the same situation as France in that particular. The latter would not have so many sacrifices to make as the former in the transition to the proposed monetary unification.

M. KERN came to the conference intending to vote personally and without committing his government for all propositions that would contribute to the formation of a monetary union more extensive than that of 1865, but resting always upon the same basis. He did not speak for his government. Without regard to preference to the country he represents, in a spirit of conciliation, he voted for the 25-franc piece because the delegates from Austria and the United States made this concession, and he believed England would do the same. But he was surprised to hear the delegate from Great Britain say the 25-franc piece did not appear to him to be useful.

M. KERN did not see the convenience of adopting the 15-franc piece so long as the states particularly interested, and especially Prussia, have not pronounced in its favor.

Mr. RIVERS WILSON, speaking for Mr. Graham, said the delegate from Great Britain placed himself in a purely theoretical point of view when speaking of the acceptability of the 25-franc piece. It would be rather injurious than useful to the general economy of the French system, but it would not be so in a monetary union between England and France.

His IMPERIAL HIGHNESS sincerely regretted this disagreement. If the discussion of the members is theoretical, it is only in the sense that it does not bind their governments, as if they had plenary powers; but this conference is not here for speculative studies; its aims are definite and practical, to which it is the duty of all its members to direct their efforts.

Mr. RIVERS WILSON replied that England could not but appreciate the intention with which it has been proposed to introduce the 25-franc piece.

M. DE PARIEU remarked that the words *by reason of reciprocity* were designedly inserted in question nine, now under discussion. They are always understood, and with this reserve M. de Parieu saw no inconvenience in coining and circulating 15-franc pieces. To repeat the lively remark of his Imperial Highness in respect to the 25-franc piece, it would be an *invitation* to the states that think they are not yet prepared to decide.

M. HAINDL, while confessing that the 15-franc piece would suit the German states, remarked that there would be a difference between it and the 7-florin or 4-thaler piece of $1\frac{1}{4}$ per cent. in favor of the former. It would therefore be necessary to increase the value of the thaler or

florin, which is their present monetary unity. That, perhaps, explains the hesitation of the German states.

Baron SODEN said that while favoring the 15-franc piece, he did not forget that the treaty of 1857 still binds Wurtemberg and the states that have signed it, with the exception of Austria.

M. DE PARIEU observed there is no other gold piece but the 15-franc piece that can bring Prussia, south Germany, and Holland into the monetary union. Now what ought the conference to propose? It ought to prepare a common ground and point out all possible communications between the existing systems.

Count D'AVILA approved of this, and said the conference ought to decide at once, either *for* or *against* the admission of the 15-franc piece, so that the decision might serve hereafter as a point of departure in further governmental resolutions.

M. KERN, for reasons already given, thought the states interested ought to wait for more precise declarations than have been given.

M. ARTOM, not wanting to see the 15-franc piece positively rejected, proposed to decide by vote if the question should not be reserved.

His IMPERIAL HIGHNESS consulted the delegates to know if any state wished to exclude the 15-franc gold piece from the monetary union.

The conference replied negatively to the question, with the exception of Sweden and Norway.

His IMPERIAL HIGHNESS then put the question: "Shall the 15-franc piece be mentioned in question nine, or shall it be reserved?"

Seven states voted for the mention, seven against it, and six did not vote.

Those in favor were: France, Spain, the United States, Greece, the Netherlands, Portugal, and Russia.

Those against were: Austria, the Grand Duchy of Baden, Switzerland, Italy, Denmark, Sweden, and Norway.

These states did not vote: Bavaria, Belgium, Great Britain, Prussia, Turkey, and Wurtemberg.

Question ten, in relation to silver or alloyed coins, was next read. The conference decided that the question could not be settled then.

The proposal of Baron de Hock and M. Jacobi, relative to the principle involved in question eleven, concerning the control to be exercised in the coinage of the common types of the international money, was approved by a unanimous vote. As to measures of verification and control, they will be specified in the arrangements between the states, and the negotiators may refer to the conventions of 1857 and 1865.

M. DE PARIEU, observing that the Baron de Hock had prepared a note upon the question, it was voted that the note be annexed to the minutes.

The VICE-PRESIDENT of the conference said the twelfth question was proposed in case the delegates did not agree on any of the principles laid down in the first part of the list. As this did not happen, and the

question of a standard was unanimously agreed upon, the conference decided that the twelfth question be suppressed.

On motion of his IMPERIAL HIGHNESS, the conference adjourned till Tuesday, the 2d of July, in order to come to an understanding upon the best means to realize the desires of the conference.

The sitting closed at half past twelve, noon.

NAPOLEON, (JEROMÉ,)
Prince, President of the Convention.

CLAVERY, *Secretary of the Conference.*
ROUX, *Secretary Adjunct.*

FIRST APPENDIX TO THE MINUTES OF THE SIXTH SITTING.

Note, or written argument, presented by Mr. Ruggles, delegate from the United States of America, at the sixth sitting, on the 28th of June, 1867.

The delegate from the United States of America proposes that France shall issue a 25-franc gold piece.

If it be objected that such a piece, not containing an even number of grams, would impair the symmetry of the metric system, it need only be stated that France has not, and never has had, a gold coin containing an even number of grams. The relation in value between silver and gold having been fixed by law at 15½ to 1, it became impossible to establish a decimal relation between the two metals; or, in other words, between the number of francs which represent only silver, and the number of grams in the coins of gold. This legal relation of 15½ to 1 is itself fractional, and must be doubled and carried to $\frac{31}{2}$ to make even numbers.

The franc is simply a monetary word, which expresses 5 grams of silver nine-tenths fine. It is the French monetary unity. Gold having a value of fifteen and a half times greater than silver, it requires 15½ francs each of five grams of silver (say $5 \times 15\frac{1}{2} = 77\frac{1}{2}$ grams) to buy 5 grams of gold, or 155 grams of silver to buy 10 grams of gold. As 31 is the smallest even number of this relation, 31 is the smallest number of francs which can be represented by a piece of gold having an even weight of grams. No enlightened government would consent to confine its gold coinage to pieces of 31 francs and its multiples. We therefore perceive that France has made complete abstraction of metrical weight in its gold coins, not one of which weighs an even number of grams.

The gold piece of	5	francs	weighs.....	1.6125	grams.
"	" 10	"	.....	3.3250	"
"	" 20	"	.....	6.4500	"
"	" 50	"	.....	16.1250	"
"	" 100	"	.....	32.2500	"

The proposed 25-franc piece would weigh 8 grams .0625, and, in fact, would more nearly approach an even metrical weight than any French gold piece now existing.

This relation of 15½ to 1 is practically prescribed by the French law, which enacts that 155 (5×31) pieces of 20 francs, being 3,100 francs, shall weigh 1,000 grams, or one kilogram; but the same ratio would exist between 124 (4 × 31) gold pieces of 25 francs, which would also contain 3,100 francs, and would also weigh one kilogram.

The United States have never attempted to fix a decimal weight for their gold coins, although they were among the first to adopt a decimal monetary system. The present gold dollar weighs 25.8 grains troy, which is about equal to 1.671 milligrams, and exceeds the metrical weight of the French 5-franc piece about 58½ milligrams.

A gram of gold nine-tenths fine is equivalent in round numbers to 30 pence English, or 60 cents of the United States. Consequently, 58½ milligrams taken from the dollar would reduce it about 3½ cents, or 292½ milligrams taken from the half eagle of 5 dollars would reduce it 17½ cents, being about 3½ per cent.

It is needless to expatiate on the comparative merits of a decimal, a duodecimal, or a binary system, for the reason that the decimal system has become a fixed fact in a large portion of the civilized world, rendering any change practically impossible. In like manner the unification of the coinage of the world has become a question of a nature more practical than scientific in character, chiefly falling within the domain of commerce and finance.

The "international committee on uniform weights and measures and coins," charged with the preliminary study of the question, took into consideration not only what is theoretically and abstractly possible, but what is commercially and financially practicable. The subsequent duty of fixing a common coin as the monetary unit required an international conference, composed of representatives duly accredited, from the various nations, and vested with diplomatic powers.

If the labors of the international committee were to prepare the subject for a diplomatic conference, it might well state that so large a reduction as 3½ per cent. in the gold coin of the United States would seriously affect existing contracts, and that such a change would only be sanctioned by the government and the people of the United States in order to assure to mankind the greater and more important benefit of a common currency throughout the globe. As the expense of recoinage would be considerable, and will increase in proportion to the production of gold in the United States, the change must be made immediately if made at all. It should be remembered that the population of the United States, now near 40 millions, will probably exceed 100 millions at the close of the present century, in the short space of thirty-four years.

Long before that time the annual product of gold and silver in the United States will be greatly facilitated and increased by the completion

of the Pacific railroad, across the continent, and now in rapid progress, which will open outlets to both of the oceans for our widespread metallic interior, now so difficult of access. Its annual product, now nearly 100 millions of dollars, may eventually reach 300 or 400 millions. The money of the world must be unified now or never.

It is fortunate that the gold sovereign of Great Britain, around which the prejudices of the English people naturally cluster, only requires to be reduced to the value of 25 francs, a diminution of 64 milligrams in weight of fine gold, being a reduction in value of only 2 pence English, or 4 cents of the United States. In truth, the reduction to be made by Great Britain is less than one-fourth of that required from the United States.

The great and inevitable injury that must result from undue delay in unification in an epoch like the present, when the product and coinage of gold is so rapidly increasing, will more clearly appear from the following gold statistics of the three largest coining nations.

I. The United States of America, in the fifty-seven years from 1792 to 1849 next preceding the great discoveries of gold in California, coined in gold only $85,588,038; being in francs, at five to the dollar.....	427,940,190
From June 30, 1849, to June 30, 1851, the two first years of the auriferous era, the issue was $94,596,230; or in francs	472,981,150
In the fifteen succeeding years, ending June 30, 1866, it was $665,352,323; or in francs.....	3,326,761,615
Total in dollars, $845,836,591; or in francs	4,227,682,955
(Of this amount, $146,923,622 was stamped in bars.)	
II. The present gold coinage of Great Britain dates from 1816, the year of its reform. From 1816 to 1851, thirty-five years, there was coined in gold £96,021,151; being in dollars, at five to the pound, $480,105,755; in francs.	2,400,528,775
In the fifteen years from 1851 to 1866, £91,047,139; being in dollars $455,233,695; or in francs	2,276,178,475
Total dollars, $935,341,450; or in francs.....	4,676,707,250
III. In the fifty-eight years from 1793 to 1851, inclusive, France coined in gold $324,492,516; or in francs.....	1,622,462,580
(Of this amount only $107,605,088, or 538,024,440 francs, was coined by Napoleon I.)	
During the fifteen years from 1851 to 1866 there was coined, by Napoleon III, $987,728,298; or in francs ..	4,938,641,490
Total coinage of gold by France, $1,312,220,814; or in francs.....	6,561,104,070

SUMMARY FOR THE THREE NATIONS.

Before 1851, by the United States	$180,184,268	
by Great Britain	480,105,755	
by France	324,492,516	
		$984,782,639
From 1851 to 1866, by the United States.	665,352,323	
by Great Britain	455,225,695	
by France	987,728,298	
		2,108,356,316
Total gold coinage of the three nations		3,093,098,855
or 15,465,494,275 francs.		

If we add to this enormous sum the gold coinage of Prussia, Russia, Austria, and other important countries of Europe, we can judge of the importance of a monetary unification that would give the same circulation, the same character, and the same value to this entire mass, and of the sums which would be saved, now needlessly expended in recoinage, brokerage, and exchange.

Of the gold of these three nations, we see that France furnishes 1,312,220,814 dollars which would not require recoinage; while a considerable portion of the residue, ($1,780,878,041,) furnished by Great Britain and the United States, would need to be recoined to unify the money of the civilized world. From the latter amount we must deduct—

1st. What has been already recoined by France, deducting the French gold recoined by Great Britain or the United States.

2d. What has been lost or used in the arts.

3d. Coins so much worn as to be reduced to the weight of the number of francs they should represent. This last reservation will apply almost exclusively to the coins of Great Britain, many of which have worn off the one per cent. of the required reduction, while very few of the coins of the United States have lost their excess of three and a half per cent.

It is, moreover, to be considered that the United States and Great Britain may continue to add, for many successive periods of fifteen years, the gold to be produced in America and Australia, which will, probably, fall little short for each period of $655,352,323 for the United States, and $455,235,695 for Great Britain—the amounts respectively coined during the fifteen years just elapsed. We will not dwell upon what cannot be forgotten, the possibility of a still more enormous product that would result from the more extensive developments and discoveries in the vast auriferous interior of the United States, a field as yet only partially explored.

Without going too far in measuring the gigantic monetary future in reserve for the world, we simply say that the work of unification cannot begin too soon.

It is by no fault of France, but her good fortune, that the burden and inconvenience of the recoinage and the modification of contracts will be almost exclusively borne by the United States and Great Britain, while France, with her six milliards of gold in circulation, will share without cost in the general advantage and the honor of having unified the money of the world.

It is under these circumstances that it is asked, in the name of the United States, that France, in a spirit of wise liberality, will effectually contribute, as she easily may, to the great work of practical unification by adding the 25-franc gold piece to her present coins.

Such a coin will circulate side by side everywhere and in perfect equality with the half-eagle of the United States and the sovereign of Great Britain.

The three gold coins, types of the three great commercial nations, fraternally united and differing only in emblems, will go hand in hand around the globe, freely circulating through both the hemispheres without recoinage, brokerage, or other impediment. This opportune concession of France to the spirit of unity will complete the work of civilization she has so much at heart, and will inaugurate that new monetary era, the lofty object of the international conference and the noblest aim of a concourse of nations, as yet without a parallel in the history of the world.

SECOND ANNEX.—BARON DE HOCK'S OBSERVATIONS ON THE MEANS OF CONTROL.

Eleventh question.

It is necessary to fix the following principles:

1st. The money shall be coined of its full standard and weight, without abatement for coinage or any remedy; in no case must there be connected any particular interest, in view of any profit, with the fabrication of money.

2d. The kilogram shall be established as a weight for the common coins; the weights used by the mints must be made after a common normal weight.

3d. Common methods of assay and equal limits of tolerance for standard and weight of the common coins must be agreed upon.

4th. Coins of the same value must have the same diameter; they shall bear the date of the year when they were coined.

5th. When many pieces coined in the same year are found to be defective, by a process to be agreed upon, the government in default shall call in all the pieces issued in that year.

6th. An understanding shall be had as to the method of withdrawing from circulation all clipped coins, those diminished in weight beyond the limits of tolerance, or those on which the inscriptions have become illegible.

7th. It shall be held as a principle that each state shall punish violations of the monetary laws of the other states, as well as infractions of their own laws, and on this principle a monetary cartel shall be agreed upon.

INTERNATIONAL MONETARY CONFERENCE.—SEVENTH SITTING.

TUESDAY, *July* 2, 1867.

Prince Napoleon presiding. The sitting opened at half past eight. Present, the delegates that attended the preceding meeting and M. Fortamps, with the exception of M. Delyannis. The minutes of the sixth sitting were adopted.

M. DUTILLEUL regretted that the conference decided at its last meeting in favor of the legal currency of gold coins of five francs in the states uniting in a monetary convention. He preferred to declare those coins receivable in the public banks, and wished this opinion of his to be inserted in the minutes of the present sitting.

M. JACOBI, asked an explanation of the words *cartel monétaire*, used in Baron de Hock's seventh observation, inserted at the end of the sixth report.

M. PARIEU replied that it was an arrangement between states to punish counterfeiters. He added, that in France the penal code furnished all the arms necessary to reach counterfeiters.

Chevalier ARTOM observed that all conventions of extradition contain provisions applicable to counterfeiters.

His IMPERIAL HIGHNESS then stated that the conference had reached the theoretical terminus of its deliberations. The business now is to analyze and specify the results of its labors, and then to come to an understanding about the means of arriving at a practical solution.

His IMPERIAL HIGHNESS proposed to intrust to the vice-president of the conference the care of embracing in an abridged report the facts and decisions stated in the minutes.

In regard to the means of arriving at a practical solution, they might be comprised in the three following propositions, which his Imperial Highness would submit to the conference:

1st. Ought the states to agree upon a general arrangement?

2d. Ought the countries that wish to make separate arrangements confer with the states of the convention of 1865?

3d. In any event, what must be done to arrive at a practical result? Has the time arrived for laying the question before the different governments?

Baron DE HOCK wished an understanding between special conventions and the states of the convention of 1865, and not by separate and isolated legislative measures.

Chevalier ARTOM thought that, even in a theoretic point of view, a decision should at once be made by the conference in favor of M. Hock's proposition.

Count D'AVILA, while agreeing to the general mode of proceeding proposed, did not see the necessity of a special arrangement in what concerns, for instance, Spain and the United States, both having adopted the fineness of nine-tenths, for all they would have to do would be to bring their coins to the weight of the 5-franc piece or its multiples. After doing that it would be enough for them to accede to the convention of 1865.

Baron DE HOCK insisted upon the necessity of special arrangements as he proposed. It was not only necessary to agree upon the fineness and weight to constitute a monetary unity; the entire process, from the metallic composition to the means of control, should harmonize, and the monetary regulations in the states of the union should give assurances of stability.

M. FORTAMPS agreed with M. de Hock. When one state gives legal currency to the coins of another state, it is essential that the fineness, weight, tolerance, control, &c., should be similar on both sides. Under this implied reserve the right of accession was inscribed in the convention of 1865.

M. HERBET said the reserve had already been used. The Papal States and Greece have declared themselves ready to accede to the convention of 1865. The request was considered by the French government and submitted to the three other cosigning governments.

M. FEER HERZOG thought that accession to the treaty of 1865 ought to be the subject of a formal convention to assure identity of fabrication.

Count D'AVILA agreed with MM. Hock, Fortamps, and Feer Herzog on the necessity of assuring the identity of fabrication in all coins received in the states of the proposed union; and he thought that, as soon as these conditions were complied with and were recognized by the states that signed the convention of 1865, they should have the right of accession to the convention without any new action on the subject. It should be well understood that the arrangement will only relate to gold pieces as a universal coin.

M. JACOBI thought that the arrangement of 1865 does not expressly stipulate the adoption of gold as a standard, as voted unanimously by the conference. Certain states should unite on this principle at first, and then the contracting states of 1865 could more easily join them. Other countries might come in afterwards.

His IMPERIAL HIGNESS replied, it was not so easy for the French government to take the lead in the selection of a standard as M. Jacobi thought. The adoption of the gold standard, exclusively, would require a modification of the French law, and, of course, the subject would have to be laid before the legislature. The double standard had many staunch advocates in France, who would certainly oppose the withdrawal of silver from circulation. At least it would be very useful for the government to rely on diplomatic arrangements, already concluded, showing that the principle of the single standard is admitted both in theory and

practice by many other states, when the subject is laid before the legislature. It is a simple subject for domestic consideration.

M. PARIEU thought the interest of the states alone would be sufficient to bring about a diplomatic arrangement. It may not be necessary for the conference to decide this question absolutely. In fact, the countries that think proper to revise their interior legislation at once, introducing the principles adopted by the conference, would not hesitate to solicit an accession that would insure the benefits of internationality to their new coins.

The Papal States and Greece have acted in this manner; the pontifical government, in particular, that had placed the monetary regulations of the Roman States in harmony with the convention of 1865, with some differences as to what concerned the admission of a division of 2 francs 50 centimes, soon renounced the last provision in order to accede to the convention in question.

M. KERN thought that despite the favorable dispositions shown by many countries, a general understanding upon the application of the principles admitted must take place slowly, by successive accessions to the states that composed the monetary union of 1865.

Mr. RUGGLES seconded Baron Hock's motion, so far as his instructions would allow. He said that on the 27th of May last, when M. Berthemyt the French minister in Washington, invited the government of the United States to participate in the present conference, he declared that its object was to exchange views and discuss principles, but added this importan, clause, "to seek for a basis for further negotiations." By reason of that communication, Mr. Seward, the Secretary of State, empowered him (Mr. Ruggles) "to represent the government of the United States in the proposed conference to the extent and in the spirit of the letter of the French minister above mentioned."

Neither in terms nor spirit does that letter limit the labors of the conference to the discussion of abstract principles; on the contrary, it plainly declares the principal object of the conference to be "to seek for a basis for further negotiations."

Fortunately, this end has been attained. The conference has sought out and discovered the desired basis, not a vague, changeable, and uncertain one, but the basis of a fixed and fundamental system, the principal points of which are these:

First, a single standard of gold; second, coins of equal weights; third, coins of equal fineness; fourth, coins divided according to the decimal system; fifth, 5 francs as the unit.

The propagation of a system thus defined would practically complete the labors of the conference. The details of application could not be attended to at present; they should be regulated by some subsequent conference, or by the different states separately.

M. WALLENBERG wished to mention a remarkable fact. By a ukase of the 11th November, 1865, the Russian government introduced a mone-

tary system in Finland almost identical with that of the franc, the difference not exceeding the limits of toleration. Now, if the Russian government would extend these provisions to the other provinces of the empire, an important assimilation would be realized.

He added that, in his opinion, a general understanding should be had only on gold coins, upon the basis of the convention of 1865. Each state would be free to coin its silver change as it pleased.

M. PARIEU proposed this paragraph, which he thought would be acceptable to all the delegates:

"The conference expresses the hope that the measures taken by the governments of the different states to modify their monetary system, in conformity with the basis laid down by the conference, may end in diplomatic conventions."

The paragraph was unanimously adopted.

His IMPERIAL HIGHNESS suggested the fixing of a time for the different governments to make known their decisions upon the resolutions voted for by their delegates, and the ultimate steps to be taken.

M. KERN thought it should be put off till the end of the year, or till November, so as not to hurry the governments in their decisions. After the expiration of that term, there might be no occasion to call the whole conference together; the French government could invite the states that should express.a desire to enter into negotiations immediately to send delegates to a new conference.

Chevalier ARTOM and M. WALLENBERG proposed a delay of three months.

Mr. RUGGLES said the government of the United States could not give a positive answer till the subject had been submitted to Congress, which would not meet before the 1st of December next; he therefore proposed to fix the term for the 15th of May, 1868.

M. MEINECKE would report to the Prussian government as soon as the labors of the conference were closed; but he was sure the answer could not be positive unless sufficient time was granted, because his government could not decide the question without consulting the North German Confederates and the governments that signed the convention of 1857.

M. HERMANN assented, as far as Bavaria was concerned.

M. VROLIK wished the term to be more than three months, and added that Holland could not decide till it learned the intention of the German states.

Count D'AVILA said it was well to avoid every act that would embarrass the free action of the governments. Let the French government communicate the resolutions voted by the conference to the different states, request a prompt answer, collect the answers, and then call a new conference, if necessary; that was the best thing to be done.

M. KERN agreed to it, adding that the French government might agree beforehand about that convocation with the other states that signed the convention of 1865.

M. JACOBI was of the opinion that the states that have signed that act ought to form but one group in agreement, so as to give but a single answer.

His IMPERIAL HIGHNESS saw no objection to accepting Count d'Avila's proposition, and concurred in the remarks of M. Kern and M. Jacobi, but he still thought it well to fix a certain delay.

M. HERBET proposed to fix upon the longest delay, with the right to anticipate it in diplomatic language, by adding, "within six months, or sooner if possible."

MM. FORTAMPS and WALLENBERG insisted that the delay should not be too long. It was not necessary to present the question to the legislatures of the different countries before the governments made known their intentions. As often happens, the negotiation could take place, then the diplomatic act in consequenc could be submitted to the legislative assemblies, according to the constitutional forms of each state.

His IMPERIAL HIGHNESS asked the English delegates what time they would require.

Mr. RIVERS WILSON replied that the longer the time given the greater chance for a satisfactory answer from his government. He feared that by hurrying the decision of the English government no good would be effected. He proposed the 1st of June. Mr. Rivers Wilson added, that, on the whole, he could not promise a final decision for England at any fixed time. If the British government was disposed to adopt any measures, it would probably limit them to an inquiry to be made by a committee of the House of Commons, or by a royal commission.

Mr. RUGGLES earnestly urged the adoption of the 15th of May, 1868.

M. HERBET thought if a state desired to treat upon the enlarged basis of the convention of 1865, before the expiration of the delay voted by the conference, no opposition should be made to its entering into immediate negotiations with one of the states signing the diplomatic act.

After discussion of the time to be fixed, his Imperial Highness put to vote this proposition of M. Parieu:

"As soon as answers shall be received from the different states to the communication officially made to them of the labors of the conference by the French government, that government, in accordance with the answers that may be received, will call a new conference, if necessary.

"It is desirable that answers should be received before the 15th of February next."

The first paragraph of the proposition was unanimously adopted. The vote on the second was as follows: the following voted for the 15th of February, 1868:

The Grand Duchy of Baden, Bavaria, Denmark, the Netherlands, Portugal, (adding, "or sooner if possible,") Prussia, Russia, (or sooner if possible,) Switzerland, Turkey, Wurtemberg.

The following voted for the 1st of October, 1867:

Austria, Belgium, Italy, Sweden, and Norway.

The United States voted for the 15th May, 1868; Great Britain, for the 1st June, 1868.

France and Spain did not vote. Count Nava de Tajo said he did not vote because he was not instructed by his government, but he was sure that Spain would act with the majority.

The conference having decided all the questions it was called upon to discuss, his Imperial Highness thanked the delegates for their enlightened assistance.

It was then agreed that the conference should once more assemble to adopt the minutes of the present sitting, and to hear the reading of the report that M. Parieu had been kind enough to prepare.

The sitting closed at 11 o'clock.

NAPOLEON, (JEROME,)
Prince, President of the Conference.

CLAVERY, *Secretary of the Conference.*
ROUX, *Secretary Adjunct.*

INTERNATIONAL MONETARY CONFERENCE.—EIGHTH AND LAST SITTING.

SATURDAY, *July* 6, 1867.

Prince Napoleon presiding. The sitting opened at 1 o'clock. Present, the delegates that attended the last meeting, and M. Delyannis, with the exception of Messrs. Kern, Vrolik, Viscount Villa-Maïor, Meinecke, and Graham.

His excellency Mihran-Bey-Duz, member of the grand council of justice, director of the mint of Constantinople, delegate from the Ottoman government, whose arrival in France was delayed, and who had been temporarily represented by Colonel Essad-Bey, took his place among the members of the conference.

The minutes of the seventh sitting having been adopted, on invitation from his Imperial Highness, M. de Parieu read the following report, which he had been instructed to prepare at the last sitting:

Monseigneur and gentlemen: In the month of December last, when the French government communicated the international convention of the 23d December, 1865, to the states here represented, and called their attention to the grand idea of monetary uniformity, those communications were at first received with a certain hesitation in some particulars. We have been, perhaps, too long accustomed to consign many generous ideas, sustained only by common sense, to the region of dreams, leaving them to be buried by prejudice and the blind consideration of the immutability of existing facts. We all know that every enterprise of general interest requires a spirit of unity in its aims and principal means of accomplishment.

There were many points in the monetary question so difficult that they caused divisions in the doctrines and the views of the past.

The idea of monetary uniformity long languished in the aspirations of poets and economists. The members of the convention of the 23d of December, 1865, encouraged by the success of their labors, warmly welcomed the practical idea of their extension; and on witnessing the success of the monetary union concluded between France, Belgium, Switzerland, and Italy, notwithstanding the false situation caused by the forced circulation of paper in one of the states, it was hard for the government that had presided over the conference of 1865 to refrain from asking the support of the world for a more extended monetary uniformity.

The minister of foreign affairs has told you how much the imperial government was pleased at the eagerness of all the sovereign states of Europe, and of the government at Washington, in sending delegates to the conference proposed to them. In giving to the assembly a president whose great name, exalted position, manifest impartiality, and decided sympathy for monetary uniformity, have given our discussions a brilliancy and importance that we could not expect from our own resources, it has complimented you more highly than could be done by words, and has thanked you all, men distinguished for diplomatic merits, economical science, or technical experience in the monetary art, for the earnest welcome you have given to the ideas you were called together to examine.

What was the precise object of your conference, the nature of the questions it was to expound?

This, gentlemen, was the first object of your reflections, and upon it the success of your meeting depended. The government of the Emperor might prepare the studies, but it could not fix the terms.

Monetary science is vast; many of its problems are debated by philosophers. Not one could be avoided: appeals were to be made to reality, the only solvent of such problems, and the one of particular importance in the subject now before us for consideration.

At the trade conference of 1864, in Frankfort, it was truly said, "monetary questions are more practical than all others."

The chief question for examination was the monetary standard.

On this subject you are aware that the world is divided between three different systems, the gold standard, the silver standard, and the double standard. It was indispensable to know which of these forms would furnish the most desirable and permanent basis for a monetary unity.

Governed by these considerations, you have agreed upon a series of questions as the basis of your labors, on the report of a committee of seven members, in the formation of which all the systems had been equitably represented.

This "questionnaire," to adopt a neologism of our administrative language, you unanimously adopted in the following terms:

"1st. What is the best way to realize monetary unity—by the creation of an entirely new system independent of existing systems, and in that

case what should be the basis of that system; or, by the combination of present systems, taking into consideration the scientific advantages of certain types, and the number of nations that have already adopted them? In the latter case what monetary system ought to be chiefly considered, with the reserve of any improvement that might be made in it?

"2d. Can identities or partial assimilations of monetary types be now constituted on a large scale by adopting the silver standard exclusively?

"3d. On the other hand, can that result be reached by adopting a gold standard exclusively?

"4th. Could a similar result be attained by adopting the double standard and fixing in all the nations the relative value of gold and silver?

"5th. In case of a negative response to the preceding questions, is it possible or expedient to establish identity or partial assimilation of monetary types on a large scale with a silver standard, leaving each state the liberty of preserving its gold standard?

"6th. Is it possible and useful to establish identity or partial assimilation of monetary types on a gold basis, leaving each state the liberty of preserving its silver standard?

"7th. In case of affirming one of the two preceding questions, would the internationality of the coin adopted as a common standard be a sufficient assurance of its continued circulation in each state; or would it be necessary to stipulate a certain limit in the relation between the value of gold and silver, or to provide for the case in which international coins would run the risk of being expelled from circulation in any of the contracting states?

"8th. For the success of monetary unity is it necessary to constitute an identical unity of metallic composition everywhere with similarity of weight and denomination, and what basis is to be adopted; or is it enough to constitute common types of a common denominator as high as multiples of 5 francs for gold?

"9th. In case gold is adopted as an international metal, would it be useful for the types of that coin adopted by the monetary convention of the 23d of December, 1865, to be completed by new types of 15 and 25 francs for the sake of unity and in the spirit of reciprocity? In this case, what should be their dimensions?

"10th. In case of affirmative to questions three or six, would it be useful to regulate silver or copper coins by common obligations as to their composition or standard, their limit in payment, or the amount of their issue?

"11th. Would it be proper to fix certain means of control to insure the exact coinage of the common types of the international money?

"12th. Besides the immediate practical possibilities already discussed, would further discussions of general principles be desirable to spread over Europe the assimilations already effected or hereafter to be realized in respect to money?"

Although no idea of exclusion has entered into this "questionnaire,"

it is remarkable that its discussion during five sittings has suggested no serious addition; on the contrary, the 10th and 11th questions you have put off, although the principle of measures of control has been judged indispensable to the success of the monetary conventions, and the 12th question was left undecided.

The decisions of the conference, as a whole, have been regulated by the dominant desire that any future monetary legislation shall result, as far as practicable, in diplomatic conventions between different states, to secure them against their own inconstancy. It is the evident interest of the states to secure the political advantages of the assimilation of their monetary types by the reciprocal circulation of their coins.

You did not think the reciprocal circulation in public banks, as resolved upon in 1865, completely answered the aspirations for a monetary uniformity; and, contrary to some reserves found in your minutes, you thought legal currency ought to be considered the last word in the tendencies to unity.

The nine first questions of your sittings are comprised in three formulas too abstract to be discussed, and I will reduce them to their simplest form of expression.

The whole world agreeing upon the benefits to be derived from monetary unity, but the difficulties and delays of effecting it being very apparent, the question is, how can it be effected? By the creation of a new monetary system established *a priori*, or by strict adhesion to existing systems, or simply by bending them, so to speak, and perfecting them hereafter?

Such was the triple problem proposed for your solution.

All of your states, except Belgium, have agreed not to propose a new system, lest such an undertaking might indefinitely delay the desired monetary assimilation.

A new system would have probably been founded upon the adoption of a decimal gold piece of a certain weight as a unity. You do not say that such a regularity could be attained without difficulty, however beautiful it might be in theory, and without disturbing inveterate habits found in the attachment to the silver franc, almost a copy of the old French *livre tournois*.

Instead of seeking a system new in all its parts, you have preferred to adopt that of the monetary convention signed at Paris on the 23d of December, 1865, and which being now adopted by Rome and Athens, seems by a fortunate coincidence to reunite the greater portion of the countries in which at the close of ancient history, civilization by various modes had marked out the perimeter of its first empire.

The close union of this system, in its silver coins, with the metrical weights, whether the coins be considered as a distinct standard or as small change, and the 72,000,000 of people that use it and are attached to it, have made you regard it as a centre of assimilation around which the efforts of other nations might cluster with probabilities of success. But you did not look upon the system as fixed and perfect.

You rightly thought it capable of contraction or extension; that, though the unit was called a *franc* here, a *lira* there, and a *drachma* elsewhere, still a greater latitude was possible, particularly in regard to the unit value.

Most of the civilized nations have a monetary unity above a franc in value. The piastre, the thaler, the ruble, and the dollar, four pieces similar in origin and name, are nearly the quadruple or quintuple of the unit adopted in the convention of 1865.

If the German and Dutch florins and the Spanish crowns differ less from the franc, on the other hand the wealthy British civilization places its monetary unit much higher in value.

Though the small Roman state has converted its *scudo*, similar to the piastre and dollar, into francs, we can hardly hope that larger and more populous states will immediately adopt all the monetary unities we have reported in the convention of the 23d of December, 1865. You have, therefore, thought proper to suggest a single unit as a common denominator, borrowed, from the system of the convention, around which the other unities should circulate.

If silver had been adopted for the unitary basis, all other systems might have been assimilated to the franc as a common denominator. But could the silver franc have been the pivot of equations, commensurabilities and coincidences desired in the monetary systems we would like to make universal for the benefit of exchange, trade, travel, financial, statistical, and scientific operations? To a certain extent, this was the chief question for your deliberations.

Here the laws that brought the precious metals into contact with the wealth of communities, and which have twice given a monetary system to the universe, came into consideration. The rule of these laws was broken by the great historic catastrophe that separated ancient from modern civilization by an intermediate period of poverty and barbarism, but now strikingly reproduced after a lapse of nearly eighteen centuries.

In the time of Augustus, when gold had gained the ascendancy in money circulation, the Roman poet exclaimed:

> Æra dabant olim; melius nunc omen in auro est,
> Victaque concedit prisca moneta novæ.

From the middle ages to our day, the revolution that Ovid mentions incompletely, for he omits silver, has lain quiet, till it breaks out now with renewed strength and peculiar mineralogical, industrial, and commercial circumstances. No new invasion of barbarism can reverse its course in Europe, where silver first took the place of iron and copper, and where silver is now displaced by gold.

In most of the civilized nations of Europe and America the latter metal has become the principal instrument of circulation, because its portability and density particularly recommend it as the material for monetary unity. When the convention of the 23d September, 1865, closed, three of the associate states wished gold to be the choice of the convention. Even in the last century, a learned man of Germany, where so many

grand ideas originate, declared that gold was destined to become the bond of the monetary systems of the universe.

By a most singular coincidence, when only two out of twenty states had gold for a standard, your conference decided upon it for the standard, with silver as a transitory companion; and this was done because the double standard was necessary in certain states that were used to it, or where silver was the exclusive standard.

This valuable unanimity on a question so important, tending to perfect the monetary system of the convention of 1865, will certainly influence public opinion, and certain men in the interior of states who may have retained any doubt on the question.

In thus adopting gold as a basis for the desired union, it was only in a common denominator above the franc that it was possible to realize the useful equations and frequent coincidences in the systems to be brought together; for, in gold coins, the very minute differences could not be distinguished with precision by the process of coinage, and already the mere distance of five francs may be sometimes difficult to express sufficiently in the external form of the monetary disks.

The weight of five francs in gold of nine-tenths fineness, the standard which was unanimously approved, and also one of the conditions of the convention of 1865, then appeared to be the proper denominator for the basis of the desired assimilation between the monetary systems of the twenty states represented.

You are aware that the coins of the union of 1865 are already grouped around this denominator.

For example, it was shown how near the type of 25 francs came to the pound sterling, the half-eagle of 5 dollars, and a piece adopted by the Vienna conference to represent the value of ten florins. This type of 25 francs, especially recommended in the conference by the representatives of Austria and of the United States, has been unanimously accepted by the states that voted in the discussion of question nine, but on optional conditions.

Your opinions were more divided, in fact equally, in regard to the utility of recommending at present a gold piece of 15 francs, the approximate equation of 7 florins of the Netherlands and South Germany, and of 4 thalers of North Germany. But, without recommending this type, as you did that of 25 francs, you nevertheless agreed that, if circumstances rendered it proper, it would be open to no serious objection in itself, unless it might be in the delicacy of the process for coining it distinctly.

The eventual extension of the types of gold coins would necessitate, *a fortiori*, for the states that desired it, correlative latitude in the forms of their silver coins, the internationality of which is of less importance.

Such, gentlemen, are the simple but instructive and plain bases that you have thought proper to accept as a sort of siege to the citadel of monetary diversity, the fall of which you would like to behold, or, at least, to gradually destroy its walls, for the benefit of the daily increas-

ing commerce and exchanges of every description among the different members of the human family.

The desire of not detaining you longer, gentlemen, after a session of three weeks, is my apology for the imperfection of this hastily written digest, which is made in the hope that some decision may be reached by the middle of February, 1868, or at least some instructive steps taken by the governments that have sent you to this conference.

If the germs of our collective, enlightened and benevolent aspirations, freed from the unpleasant compensations that sometimes attend the most seductive reforms, in which we are all animated by the true spirit of civilization and modern progress, shall come to fructify around you, I hope, gentlemen, you will pleasurably recall the honorable memories of the part you have taken in these delicate scientific discussions, with the satisfaction of their joint pursuit, under a presidency so memorable, and with a facility and harmony as perfect as that of delegates from a single nation in its ordinary deliberations.

E. DE PARIEU,
Vice-President of the International Monetary Conference.

After the interchange of a few observations, the terms of M. Parieu's report were unanimously approved by the conference.

Baron DE HOCK then pronounced the following address:

Monseigneur: In the name of the foreign members of the conference, I have the honor to present to you their most sincere homage for the wisdom, the profound knowledge of the cause, the assiduity and the energy with which you have been pleased to direct our labors, and to thank you most respectfully for the kindness and indulgence of your highness in accepting our observations and our counsel.

Allow us also, monseigneur, to express our thanks to the honorable M. de Parieu, who presided over our first conferences, and who has since aided your highness with so much intelligence and circumspection. We reverence him as one of the authors of the convention of the 25th December, 1865, which is destined to become the basis of universal monetary unification, and as an eloquent and profound writer, whose essays have played a part so important in the propagation of the noble and luminous idea that has been the subject of our discussion, and who by his remarkable report of to-day has become the *protagoniste* of our conference.

I am also instructed to thank Messrs. Clavery and Roux, the secretaries of the conference, for the perspicacity and precision with which they have recorded our speeches in the minutes.

Your highness may be assured that the hours we have passed under your illustrious presidency will forever be precious memories for us all.

We venture to request you, monseigneur, to be the interpreter of our most devoted thanks to his Majesty the Emperor, whose name presides over all that accomplishes greatness in France.

PRINCE NAPOLEON, having expressed his personal thanks, and those

of the board, for the sentiments uttered by Baron de Hock, said he would take pleasure in being interpreter for the commission with the Emperor, who has always taken a lively interest in its labors.

Finally, his Imperial Highness advised all the delegates, in pressing terms, to exercise all their influence, when they returned to their respective nations, to carry the decisions they have adopted into some practical result.

The minutes were then approved, and his Imperial Highness pronounced the close of the labors of the conference.

NAPOLEON, (JEROME,)
Prince, President of the Conference.

CLAVERY, *Secretary of the Conference.*
ROUX, *Secretary Adjunct.*

INDEX.

Page.

Adams. John Quincy, Secretary of State of the United States. Extract from his *Report upon Weights and Measures*, 1817 487–501

Analysis.

Uniformity among nations desirable, and Congress recommended to an international consultation with France, Spain, and Great Britain.... 487–490
Gold and Silver settle the balances of trade 490
The par of exchange between Great Britain and the United States considered, $4.44 491
American value of the Pound Sterling in Gold and Silver..... 492
The medium par stated..... 492
Causes which fix the actual exchange..... 492
Laws of the United States fixing the Customs par..... 492
And that duties were to be receivable only in Gold and Silver coin taken at certain rates 492
Remarks on this subject 493
Difference in the standard of Silver in Great Britain and the United States not considered..... 494
Rates of Gold and Silver at the United States Mint under the original ordinance stated and discussed..... 494
Also the coinage of the Dollar of 375.64 grains 495
The calculations loose and inaccurate..... 495
The act of 1792 establishing a Mint and regulating Standards, &c., discussed 495
The ratio of 15 to 1 fixed, and free Coinage..... 495
Effects of this on values of British coins..... 496
The act of 1793 regulating foreign coins, and the acts of 1799, 1806 and 1816 considered..... 496
Under act of 1819 foreign Gold coins cease to be a tender..... 497
Disputes Hamilton's statement in Report on the Mint that the Unit in the coins had not been formally regulated..... 497
The act of 1792 gave us the Dollar of 371¼ grains..... 498
Rating of British Gold coins under acts of 1789, 1790 498
The Pound Sterling in England is bank paper since the act of Parliament of 1797 498
Depreciation of this bank paper..... 498
Act of Parliament, 1819, confirming restrictions on cash payments considered 499
$4.44 at no time the intrinsic value of the Pound Sterling..... 499
The Spanish Dollar has circulated at six shillings in the British Colonies since the proclamation of Queen Anne in 1704 499
The par, computed in the Silver coins of the two countries, is 4⅝ 499
Tables of relative value of the Dollar and Pound Sterling in Gold, Silver, and English bank paper..... 500

Page.

Allard, Alph., Director of the Brussels Mint, Letter to Mr. Fenton, containing Proposition of the Belgian Mint 232
"Allison Bill," the law of February 28, 1878, should be so called, and not the "Bland Bill" (Horton) 131
Alloys: Antimony renders Gold unfit for coinage 588
——— in coins (Hamilton, 1791) 467
——— in coins of various nations. *Table* 620–633
——— in Gold and Silver coins, effect of, to resist wear (*British Inquiry*, 1798). 587–589
Alternative Standard examined by Mr. Horton 85–86
American Bankers' Association, Resolutions in support of the return to specie payment 149
Anti-silver Legislation 733–735
Antimony, as an alloy, renders Gold unfit for coinage (*British Inquiry*, 1798).. 588
Appendix to the Report of the American Commissioners to the Conference of 1878 217–878
Appreciation of Gold, Effects of (Giffen) 399
Aristotle. "Economy of a Ruler" (Horton) 239
——— Referred to by Mirabeau 297
Association of Chambers of Commerce of the United Kingdom advocates the 25-franc piece for international coinage 383
Australia: Mint. See *Mint: Australia.*
Australian Colonies and New Zealand, Currency in 38
Austria-Hungary: Coins, Gold 98
——— Coins, Silver, Levantine dollar 98
——— favorable to the Double Standard (see *Küfstein and Hengelmüller*) 207
——— Monetary system, Current coins, fractional Money, Trade Coins 97–98
——— regrets depreciation of Silver (Hengelmüller) and remains expectant.. 52
Bahamas, currency in the 40
Balance of trade governs the scarcity or abundance of the precious metals (Desrotours) 272
——— unfavorable, causes export of specie (Crawford) 523
Bank of Belgium, the National, charter, capital, &c 229–231
——— has a monopoly of bank-note issue 230
——— must hold reserve of one-third of its engagements 230
——— has privilege of a reduction on cost of Coinage 137
Bank of England: Advantage gained by the, if its specie could be replenished when required by Gold and Silver instead of Gold alone (Baring, 1828) 669–670
——— charter, capital, note-issues, functions, &c 226–227
——— amount of coin-reserves left in the discretion of the Bank 226
——— returns 227
——— cuts all light coins 35
——— Dollars issued by (*Bullion Report*) 370
——— Notes of, in circulation, 1782 to 1829. *Table* 647–648
——— ——— circulation from 1798 to 1809. *Table* 368
——— Notes depreciated during suspension after 1797 (Adams) 498
——— Spanish dollars sold by, 1797 to 1810 (*Bullion Report*) 370
——— takes to the Mint the greatest part of the Gold coined in the United Kingdom 36
Bank of France, constitution, functions, paper-issues, coin-reserves, &c ... 220–222
——— not required to hold any specified amount of coin 222
Bank of the Netherlands, Balance Sheet of the, September 30, 1878, abridged, showing capital, reserves, &c 228
Bank of the United States and its offices of Discount and Deposit. General statement, September, 1819 (see *United States*) 542–547
Bank Capital in the several States, Districts, and Territories of the United States during the years 1814, 1815, 1816, and 1817. *Statement* 548
Bank-Circulation, auxiliary to, rather than a substitute for that of the precious metals (Hamilton) 460
"Bank-Money" formerly in Hamburgh and Amsterdam (White, 1829) 622
Banks inflating and contracting the currency. See *Crawford.*
——— Sixteen, in various States and Districts of the United States. Amount of capital, &c., in, on the 30th September, 1813, 1815, and 1819. Statement 551
——— in the several States, Districts, and Territories of the United States. Condition of, in the year 1819; Statement 549
——— West Indies. English Colonies, interest of, in keeping up circulation of depreciated Silver in order to control foreign exchanges. (Goschen) 39
Baralis. Commander Cæsar, (Delegate of Italy). Remarks 30, 54
——— on the Silver Coinage of the Latin Union under the Treaty of 1865 .. 89

Page.

Baralis, Presents list of laws, decrees, &c., regulating the monetary system of Italy (Exhibit B, fifth session) 109
——— Agrees with Count Rusconi in refusing to accept the Reply to the United States Propositions 165
Baring. Alexander, M. P. *Evidence taken before the Committee for Coin, April 26, 1828.*
Analysis.
Favors a Legal-Tender Silver Coinage for England on the French ratio, coexisting with the English Token coinage 667
A Gold and Silver Coinage of unlimited Legal Tender 667
The change from the Double Standard of King William to the present standard has been in favor of the creditor in the proportion of 60 to 62 668
Exclusive of the greater cheapness of money and facilities to credit afforded by the Double Standard 668
Bank of England could more readily replenish its specie if it could draw on the stock of both metals 669
And thus right itself more easily in times of pressure 669
The lesson of 1825 when the Bank was "rummaging every corner for Gold" 670
In spite of skill in the adjustment of the ratio, the practical currency, under the Double Standard, may change from one metal to the other 670
The relative value of the metals will vary 670
A seigniorage or brassage desirable to counteract the tendency to melt down one or the other metal 670
The value of Gold was increased by the English demand for resumption of specie payment 671
So Silver would increase in value if used as currency 671
A free concurrent circulation of the metals in all countries would keep their relative proportions most equable 671
A very slight difference in favor of Gold in the ratio would make Gold the ordinary and Silver the auxiliary currency 671
Occasional adjustment of ratio necessary, or the advantages of the Double Standard may be lost 672
Belgium, Monetary circulation in 179–184
——— Monetary system of (Exhibit A, fifth session) 137
——— National Bank, charter, capital, &c 229–231
——— National Bank monopoly of bank-note issue 230
——— National Bank, reserve held by 230
——— National Bank has privilege of a reduction on cost of coinage 137
——— opposed to the Bi-metallic System at the Conference of 1878 (see *Pirmez and Garnier*) 206
Bengal Chamber of Commerce resolves in favor of temporarily suspending the coinage of Silver in India (July, 1876) 409–410
——— The free coinage gave to Silver a fictitious value 409–410
Benton. Thomas H., *Thirty Years' View.* Vol. I, ch. CV.
Gold undervalued and expelled from circulation in the United States under Hamilton's Ratio of 15 to 1 484
Silver advocated by Hamilton's followers to favor circulation of bank-notes; but Hamilton himself exonerated 485
——— *On the revival of the Gold currency* (*Thirty Years' View*, 1834) 691–97
Analysis.
Federal currency should consist of Gold and Silver 691–693
Congress not authorized to emit paper money 691–693
Hamilton a paper-money man 693
The value of Gold is what the laws of great nations give it 694
The high rate of Gold in Spain, Portugal, and Spanish America, from which the United States must derive their chief supply 694
England and France retain their Gold at low rates because of peculiar laws and advantages 694
The same stated 694
Both metals may be retained in circulation 695
Value of Gold, a commercial question 695
Gold should be the preferred metal in the United States; but both should be retained 695
15½ was the ratio of nearly all who seemed best calculated to understand the subject 695
Including 18 New York banks, with Mr. Gallatin at their head 695
Mr. B., looking at the question in a practical point of view, took his stand on 16 to 1 696

Page.

Benton, Thomas H.—Continued.
Account of the passage of the bill in the House and Senate fixing the ratio at 16 to 1 696
An inflow of Gold the result, combined with "joy and confidence" 696
Berenger. Citizen, extracts from his *Second Report on Coinage* (1802).
The value of Money is founded upon that of the material used as money. 724
The choice of the material does not lie in the will of the legislator 724
The metals are money, not because of agreement, but because they are fittest 725
The value of money is independent of the will of the legislator 725
Bibliography: Money, a partial list of modern publications on the subject of (Horton) 737–773
"Billon," a composition; of what it consisted in France (Hamilton, 1791) 481
——— Not favored in the United States 481
Bills of Credit. See *Continental Currency; United States Currency, Continental.*
Bi-metallic countries acted as "equalizing machines" 205
——— system, of France furnished England with Gold for resumption and replaced that metal with Silver in France, thus steadying the exchanges (Horton) 706
——— Union considered impracticable and, even if possible, futile to influence the working of economic laws (Pirmez) 118–125
——— Union of commercial nations fixing relative values, suggested by Mr. Ingham, United States Secretary of the Treasury, 1830 569
Bi-metallism: France. See *France.*
——— United States. See *United States.*
——— Universal, an Utopia. (Goschen.) The United States do not expect it (Horton) 128
"Bland Bill." See *Allison Bill.*
Brassage. See *Mint Charge.*
Brazil: Production of the precious metals in the 18th century (White, 1829). 627
——— Annual average produce of the "King's Fifth" of Gold from 1752 to 1794 (*Table*) 653
British Coins. See *England, Coins, Historical Table.*
——— ——— Inquiry into the state of, in 1798, concerning wear, alloys, &c. (Ingham, 1830) 587–589
British India, Coins and Legal Tender in 36
Broch. Dr. O. J., (Delegate of Norway). Statement submitted by, (Exhibit A, first session) 6
——— Declaration by, respecting the Scandinavian States and the Conference. 18–19
——— Inquiry by, as to United States paper currency 49
——— Remarks by, respecting the fall of Silver 25
——— ——— on the Double Standard and the fall of Silver 28–30
——— ——— on the position of the Scandinavian States 62, 63
——— But little Gold needed by the nations to resume payments on a single Gold basis 62, 63
——— Suggests his view of practical result which might be attained by the Conference of 1878 ..... 64, 65
——— Statement presented by, of the Coinage in the Scandinavian Monetary Union (Exhibit E, seventh session) 162
Bullion, Gold and Silver, Table of, exported from Great Britain 1801 to 1810 (*Bullion Report*) 369
——— price of, in England. See *England.*
"Bullion Report." See *England.*
Calcutta Trades' Association favors suspension of the coinage of Silver in India (August, 1876) 411
Calonne, Charles Alexandre de, Comptroller-General of Finances of France (1783). Extracts from Petition to the King, &c., respecting the recoinage of 1785 ..... 254, 267
His opinion of monetary doctors 256
Reasons for adopting the ratio of 15½ 260, 263
The State benefited by the coinage of new Louis of lighter weight 264
Profit to the King's treasury 265
Profit to the possessors of old Louis 265, 266
Former recoinages recapitulated, and the one of 1785 extolled 266, 267
Canada: coins; gold dollar the unit in Dominion 38
Cape of Good Hope, Natal and the Transvaal, Currency in 38
Ceylon, currency in 39
Chase. Salmon P., Secretary of the Treasury of the United States, urges Monetary unification with Great Britain (1862) 792

Page.
Chevalier. Michel, *La Monnaie.* French national bonds payable in francs of Silver (Horton) 250
——— quoted by Mr. Walker ..... 75, note.
Cobbett. W., *Parliamentary History of England*, vol. vii., cited for the debate in the Commons on the scarcity of the Silver and on lowering the value of the Gold coins (1717) 315–322
Coinage: Amount of Gold, in United States, England, and France since the discovery of California (Ruggles, Conf. 1867) 819
——— in United States since 1792; Great Britain since 1816; France since 1793. *Statement (id.)* 863, 864
——— Denmark. See *Denmark: Coinage.*
——— England. See *England: Coinage.*
——— France. See *France: Coinage.*
——— France. System of, see *Gaudin* and *Mirabeau.*
——— freedom of; what it means (Horton) 711
——— gratuitous; what it means. England the first nation to make, gratuitous and free (Horton) 711
——— gratuitous. See *Gratuitous Coinage.*
——— Norway. See *Norway: Coinage.*
——— Sweden. See *Sweden: Coinage.*
——— Switzerland. See *Swiss Confederation.*
——— United States. See *United States: Coinage.*
——— of Silver Money first prohibited by Parliament in 1798 (Horton) 86
——— Silver, limitation of, necessary in the United States in the present state of the question (Horton) ..... 241, note.
——— Silver, restriction of, to be left to each State. See *Reply of the European Delegates, &c.*
——— Silver, unrestricted, favored. See *Propositions submitted by the United States.*
——— Silver, unrestricted under International Agreement fixing relation between Silver and Gold, proposed by the United States at Conference of 1878 22
——— Silver, England. See *England: Coinage, Silver.*
Coins: English, French, Spanish, and United States, comparative value of, *Table* 582–3
——— Gold, comparative fineness of, in different countries; weights, values, &c. (Exhibit A, first session) 9–10
——— Austria-Hungary, Gold 98
——— Austra-Hungary, Silver 97–98
——— Denmark, Gold and Silver, weight, fineness, &c 101
——— England. See *England: Coins.*
——— French, table of 157
——— Gold, foreign, not Legal-Tender in United States after 1819 (Adams.) 497
——— Gold, proposed as universal money 10, 11
——— Gold and Silver, foreign, at what rates taken at United States custom-houses under law of 1789 (Adams) 492
——— Foreign, values of, in United States under laws of 1793, 1799, 1806, 1816 (Adams) 496
——— "Latin Union," weight, fineness, &c., of, in the 788
——— Norway, Gold and Silver, weight, fineness, &c 101
——— Russia, Gold and Silver 99, 100
——— Sweden, Gold and Silver, weight, fineness, &c 101
——— United States, copper, receivable by United States for $5 in every 100 (1786) 453
——— United States Gold and Silver, weight, fineness, &c 103–104
——— United States, English, French, Dutch, and Hamburg, comparative quality of fine metal in the *Table* 663–665
——— Various nations, quality of fine Gold, or of Silver and of alloy contained in *Table* 630–633
——— Verification of, at the mints of France (under law of 1803) 156
Colbert, 1679. Coinage at State's expense in France (de Forbonnais) 285
Colombia, Dollar of, an anomaly in light weight and low standard (Moore, 1829) 610
Commerce, increase of, in 30 years past requires more Gold (Giffen) 394
Commercial depression: Causes of (Professor Rogers, 1879) 387–389
——— chiefly the rapid rise in the value of Gold 388
——— German demonetization of Silver aiding the rise 388
Comparative table of Gold Coins (Exhibit A, first session) 9

Page.

Concurrent circulation of Gold and Silver in all countries would keep their relative proportions most equable (Baring, 1828) 671
——— of Gold and Silver in France. See *Horton.*
Concurrent use of Gold and Silver necessary (Horton) 240
Conference, Monetary, 1867. See *International Monetary Conference*, 1867.
——— Monetary, 1878. See *International Monetary Conference*, 1878.
Consent, the general, of civilized States gives part of the uniformity of value to Gold and Silver (Crawford, 1820) 528
Consumption of Gold and Silver for other objects than circulation and from wear of coins (White, 1829) 625
Continental Currency (Bills of Credit) issued in 1775 418–419
——— rated in Gold and Silver coins *Table* 422
Copernicus on the *morbus numericus*, quoted by Mr. Walker 75
Copper coins receivable by the United States for 5 dollars in every 100 (1786). 453
——— English 36
Copper Coinage, English, only token money; of what it consists 36
Copper for Coinage, cost of, in 1785 448
Correspondence presented by Mr. Fenton subsequent to the Conference of 1878. 219
Crampon, Mr. Ernest. Appointed one of the secretaries of the Conference ... 2
Crawford. William H., Secretary of the Treasury of the United States.
Report on Currency to the House of Representatives (1820) 502–541
Analysis.
Submits statements of the condition of the Bank of the United States, and the amount of Bank Capital in the different States, &c 503
Condition of the State Banks 504
Deductions drawn from the facts 505
The increase and depreciation of the Currency 506
Statement of the rates of exchange, foreign and domestic 506
Circulation diminishing since 1816 507
Reduction in three years exceeding 59 per cent 508
Large exports of specie to the East Indies and China in 1817–'18 508
Evils of a decreasing and deficient Currency 509
Convertibility of bank-notes rather nominal than real 509
The currency must be reduced until in proportion to the amount of the precious metals assigned among the nations as the share of the United States 509
Banks facilitate the transmission of money 510
Advantages of metallic currency from its freedom from fluctuations ... 511
Bank issues change the relation of the Currency to exchangeable commodities 511
Expansion through the Banks generally in times of prosperity 511
With rise in prices 512
Contraction in periods of adversity 512
How brought about through the Banks 512
Circumstances of the suspension in 1814 513
At that time suspension was preferable to an extensive reduction of the Currency during the war 514
Reasons why some of the Banks in the Eastern States did not suspend. 514
Suspension incident to all Banks of circulation 514
Refers to the English suspension in 1797 514
A Currency vicious depending upon the will of banks released from all restraint against excessive issues 515
A metallic Currency with convertible Paper commended 515
The proper functions of banks 515
Of doubtful advantage to agriculturalists 516
The credit of banks has abetted extravagance, &c 516
The United States Government also responsible through sales of public lands 516
Why Congress is powerless to retain Gold and Silver in the United States 517
The trade with the East and the demand for specie 518
On the ratio of Gold and Silver in the different nations 519
Recommends a change in the United States to 15.75 519
This would cause an inflow of Gold 519
An increase of the Gold Coinage advocated 519
A Coinage compounded of Silver and Copper for small Coins 519
Objections to this plan considered and answered 520
Concerning the emission of Treasury Notes 521

Page.

Crawford, William H.—Continued.
Would afford no relief in any case unless advanced as a loan to alleviate the distress ... 522
The measure indefensible ... 522
A metallic currency tends to preserve uniformity of values; yet the metals are subject to continual variations ... 523
A metallic redundancy causes a rise in prices ... 523
Unfavorable balance of trade causes export of specie ... 523
Temporary fluctuations correct themselves ... 524
Depreciation of the metals from increased supply ... 524
Question whether the precious metals have not appreciated since the close of the eighteenth century ... 524–525
A rejection of Paper Money would cause a heavy reduction in prices by contracting the currency ... 525
To the great injury of debtors ... 525
Depressing effects in the European States of the efforts to return to a metallic currency ... 526
Two hundred millions of dollars required for European resumption ... 526
The return of France to a metallic currency during a revolution was peculiar, and circumstances favored it ... 526–527
Will the products of the mines be equal to the increased demand of the world for currency? ... 527
The general consent of civilized States gives part of the uniformity of value to Gold and Silver ... 528
Effects, if certain States should cease to use them as the Standard of value ... 528
Variations in the price of bullion in England from 1797 to 1815 ... 528
No satisfactory paper currency has ever been known, whether furnished by governments or through banks ... 529
The six requisites of a good paper currency stated ... 530
The public debt of France was reduced to one-third during the great revolution ... 530
In Holland, the portion of the debt abolished by the French Government has been restored ... 530
Public faith can no longer be violated ... 531
Dangers from a paper currency and over-issues ... 531
The history of the degradation of metallic currency is a history of frauds by governments ... 531
Paper currency should only be issued on an equivalent ... 532
And on the credit of the nation, not on special pledge of property by individuals ... 532
Only in exchange for Gold and Silver or public stocks ... 533
The banks would aid such a currency ... 533
Dangers when the currency is to be redeemed ... 534
A redundancy may be funded ... 534
Causes of high interest in new countries ... 534
At what interest the currency would be fundable ... 534
Upon being funded it should be cancelled ... 535
Banks might be permitted to issue their notes payable in the National currency ... 535
Failing in such payment to be an act of bankruptcy ... 535–536
Effect of an unfavorable state of foreign exchange in a country where the currency is metallic ... 536
In a country with a paper currency ... 536–537
Gold and Silver will rise like other exportable articles ... 537
The price of non exportable articles will not vary ... 537
Under the English paper system there was no restraint upon the issue unconnected with convertibility ... 538
Unfavorable foreign exchange not the result of a redundant or depreciated currency ... 538
Concludes that the issue of United States paper currency would be a measure of doubtful tendency ... 539
A compromise with the public creditors would be a preliminary measure injurious to the public credit ... 540
The West and South, complaining most, would derive the least benefit; reasons therefor ... 540–541
The sufferings in the efforts to resume specie payments ... 541
Must continue until the value of property shall adjust itself to our share of the precious metals ... 541
No relief by the substitution of a paper currency ... 541

Page.
Crown, British Silver, and subdivisions 36
——— (Krone) gold, the Monetary unit in the Scandinavian Kingdoms..... 101
Currency, a metallic, with convertible paper, commended by Mr. Crawford (U. S. 1820) 515
——— systems of the United Kingdom..... 35–40
Debased Silver Token Coinage, an imposition (Ingham, 1830)..... 579
Debasement of Coins from ancient weights (Ingham)..... 559–560
Decimal system for Money, recommended to Congress by Thomas Jefferson in 1783 437
——— ——— for Money, advocated by Robert Morris in 1782..... 430
Decimal Monetary System adopted for the United States (Continental Congress, 1785) 449
Degradation of Silver. See *Silver.*
Delegates. See *Members of the Conference of* 1878, list of.
——— at the Conference, Powers of the United States (Groesbeck)..... 50
——— of other Nations (Goschen)..... 50
——— of the Netherlands, their authority (Mees)..... 53
——— of Switzerland, their authority stated by Mr. Feer-Herzog..... 61
Delyanni. Mr. Nicholas P., (Delegate of Greece), declares the position of his country at the Conference of 1878..... 58
Demand: British, for Gold in 1818–21, effect of, on amount of Gold coined at the French Mint..... 676
——— for Gold for Coinage in late years, extent of (Giffen)..... 392
——— for use as Money caused the rise of Gold, not the alteration in the supply (Horton)..... 702
——— for the Money-metals as affected by law (Horton)..... 741–57
——— for the precious metals is affected by political regulations, thus influencing their relative values (Ingham, 1830) 559
——— for the precious metals is increased by legislation fixing the quality of Legal Tender (Horton) 704
——— of France for the precious metals so extensive as in great measure to control their relative values (Ingham, 1830) 569
Demonetization of Silver deprecated, and basis of understanding desired by Mr. Baralis 55
——— its effect upon the world's value (Horton) .....133 and note.
——— ——— See *Report of United States Commission* (*Conference of* 1878).
Denmark: Coins, Gold and Silver, weight, fineness, &c..... 101
Depreciation of Silver, address of the Society of the Netherlands, on the.... 185–189
——— ——— Its causes stated (Society of the Netherland) 186
——— ——— owing chiefly to Monetary legislation..... 187
——— ——— connected with appreciation of Gold (Giffen)..... 398
Desrotours. Noel François Mathieu Angot, author of *Observations on the Monetary Operation of 30th October,* 1785, *in France* 270–278
Diagram showing quotations of Silver in London, March, 1873–1878..... 13
Dollar: Columbian—an anomaly in light weight and low standard (Moore, 1829) 610
——— Gold, the unit in Dominion of Canada 38
——— the unit of the United States (Continental Congress 1785)..... 449
——— Levantine, Silver, of Austria-Hungary 98
——— Mexican, Weight, &c.; In demand for shipment; Its value in United States (Moore, 1829)..... 610
——— of Scotland. Refused for taxes in England (Newton) 319
——— Spanish-American. Estimates of amount coined annually, (*Bullion Report.*) 370
——— Spanish, circulating at six shillings in the British Colonies since 1704 (Adams)..... 499
——— ——— Lord Liverpool on the issue of, in England. (*Coins of the Realm.*)..... .....357, note.
——— ——— reduction in weight of 447
——— ——— (piece of eight) value in Massachusetts in 1750 under 23 George II., c. 5 418
——— ——— varies in standard (Gallatin, 1829)..... 592
——— ——— Weight and fineness. Commonly below weight (Moore, 1829).. 607
——— United States Silver, the unit under the law of 1786..... 103
——— ——— under law of 1792; weight, &c..... 103
——— ——— in 1786 (Adams) 495
——— ——— in 1792 (Mint Act) 495
——— ——— worth 1 per cent. less intrinsically than the Spanish milled dollar (Crawford, 1820) 519
——— ——— Tables of value of, in British Coin and bank paper (Adams, 1821). 500, 501

Page.
Dollars, issued by the Bank of England to 1810. (*Bullion Report.*) 370
——— weight of, assayed by Sir Isaac Newton in 1717 (Jefferson) 441
Dominion of Canada, currency of, coin and paper 38
Double standard: cheapens money and facilitates credit (Baring, 1828) 668
——— ——— English Delegates to Conference of 1878, opposed to the (Goschen) 166
——— ——— Russia opposed to the (Thoerner) 166
——— ——— the Nations opposed to and in favor of.
See *Report of the United States Commission* (*Conference of* 1878.)
——— ——— the Society of the Netherlands, &c., in favor of the, by international agreement 185–187
——— ——— economists who favor the (Society of the Netherlands, &c.) 187
——— ——— rejected by Belgium, (Pirmez) 27
——— ——— disapproved by Mr. Broch 28
——— ——— Japan (coinage of "yens"), (Linderman) 140
——— ——— United States, under the law of 1786 and 1792 103
——— ——— West Indies, English colonies, recently abandoned in the 39
Doubloon: Spanish. Weight and fineness. Value in the United States (Moore, 1829) 607
——— Overrated in Havana and South America (Gallatin, 1829) 593
——— Value in United States in 1776 422
Ducat: Austria-Hungary, Gold Coin 98
——— Russia, gold coin. Value, weight, &c 99
Eagle: United States Gold Coin; weight, fineness, &c., under law of 1834 and 1837 104
——— and subdivisions, Legal Tender in Dominion of Canada 38
Eagles, sale of, in London, 1821, with charges for melting, assaying, &c 619–620
Eight-florin gold piece of Austria-Hungary 98
England: Causes of the dearth of Silver in the eighteenth century stated (Horton) 353
——— greatly interested in the maintenance of Silver, but adheres to the Single Gold Standard (Goschen) 51
——— Position on the Silver and Gold Question 205, 212
See *Goschen, Gibbs, Seccombe.*
——— Suffering inconvenience for an abstract principle of gold mono-metalism, the use of an overrated Token Currency (Gallatin, 1829) 596
——— Variations in the price of bullion between 1797 and 1815 (Crawford) .. 528
——— would have profited by free Coinage of Silver from the time of Trafalgar to Waterloo (Horton) 359
——— Bank of. See *Bank of England.*
——— Bank-notes, over-issue of, effect upon, if Silver had been coined between 1798 and 1810 (Horton) 356–358
——— ——— Table of amount under the Restriction Bill from 1797 to 1809 (*Bullion Report*) 371
——— Bullion Gold and Silver, price of (*Bullion Report*, 1810) 364–365
——— "Bullion Report" to the House of Commons (1810), extracts from 364–372
——— ——— Price of bullion 364–365
——— ——— Gold, the measure of value 366
——— ——— Principle governing Gold Coin and bullion 366–367
——— ——— The metallic pound sterling taken for granted in (Horton) 352
——— Bullion and Coin, Gold and Silver, table of, expended by paymasters-general of English forces abroad from 1805 to 1810 (*Bullion Report*) .. 371
——— ——— 92 per cent. Silver, 8 per cent. Gold (Horton, note) 372
——— Coinage at public expense since 18 Car. I., c. 3 (Lord Liverpool) 341
——— ——— Copper, only token Money coined, of what it consists 36
——— ——— Gold, since 1816 863–864
——— ——— Gold, in United States, England, and France, since the discovery of California (Ruggles, Conf. 1867) 819
——— ——— Silver, coining of Silver first prohibited by Parliament in 1798 (Horton) 86
——— ——— Prohibited by statute, 38 George III., c. 59 (June 21, 1798) 345–347
——— ——— Under 56 George III., c. 68, 1816, calling in old Silver Coins and providing a new Coinage at 66 shillings to the pound Troy. Gold unlimited legal tender; Silver to 40 shillings 373–378
——— Coins, comparative values of English, French, Spanish, and United States Coins: *Table* 582–583
——— ——— Copper 36
——— ——— Gold, resolutions in the Commons respecting; to be called in and recoined (1774); to be current by weight as well as tale 330–332
——— ——— Lord Liverpool upon 341

Page.
England, Coins, Gold and Silver, weight, fineness, &c 35–40
——— ——— Historical table showing alterations in weight and fineness from the reign of William the Conqueror to that of George IV., also, comparative values 619
——— ——— Inquiry into the state of, 1798 (Ingham, 1830)..... 587–589
——— ——— Silver, amount of in the 18th century..... 337–338
——— ——— (See *Lord Liverpool.*)
——— Mint, free since 18 Car. II., c. 3 (Lord Liverpool) 341
——— ——— See *Mint: England.*
——— Monetary situation. See *Sir James Steuart.*
——— Ratio in 1717. (Desrotours)..... 271
——— ——— in 1728 —— 15.2 (Steuart)..... 326
——— ——— See *Ratio,* and *Sir James Steuart.*
——— Scarcity of Silver in. See *Silver.*
——— Single Gold Standard, statute establishing, 56 George III., c. 68 (1816) 373–378
and repealing 18 Car. II., c. 5, as to free coinage of Silver..... 373
and all statutes providing for Legal-Tender of Silver..... 374
——— "Standard" in its true sense, and "Standard" as used by Lord Liverpool and the Bullion Committee (Horton)..... 360
——— Statutes: Counterfeiting, dipping, and diminishing the Gold Coin prevented. 13 George III., c. 71, 1773..... 329
Light Silver Coins, importation of, prohibited. 14 George III., c. 42.. 332–333
Relating to the recoinage. (Title) 14 George III., c. 70..... 334
Weighing Gold and Silver Coin regulated. 14 George III., c. 92..... 334–336
Stamping the weights for coinage. (Title) 15 George III., c. 30..... 336
Continuing prohibition against importing lightSilver coins. (Title) 16 George III., c. 54..... 336
Prohibition continued. (Title) 18 George III., c. 45..... 336
Revived, 38 George III., c. 59..... 336
Made perpetual by 39 George III., c. 75..... 345–348
——— See *Gratuitous Coinage.*
——— See *Great Britain.*
——— See *Parliament.*
——— Legal Tender coinage of Silver recommended. See *Alexander Baring.*
Exchange: averages, 1823–1825 (Moore); 1827–1828 (*ib.*) 605, 606
——— Foreign, how computed by Mr. Moore in his tables (1829), with remarks on the par 603–604
——— computed between the United States, England, France, Holland, and Hamburg. *Table* 663–665
——— Rate of, between Boston, New York, Philadelphia, and Baltimore and London during 1813, 1814, 1815, and 1816; also between New York, Boston, Philadelphia, and Baltimore during same period. *Statement*..... 552–553
——— Rate of, in Baltimore, Philadelphia, New York, and Boston, on London, from 1814 to 1817. *Table* 646
——— Rate of, Baltimore on Amsterdam, Hamburg, Bremen, and Paris, from 1815 to 1829. *Table*..... 642
——— Rate of, Baltimore on London from 1791 to 1829, showing monthly fluctuations, with averages for stated periods 634–642
——— Rate of, for 60-day bills in Boston on London from 1795 to 1827, except 1823. *Table*..... 614–616
——— Current rate of, in London on Hamburg, from 1760 to 1829, and on Amsterdam and Paris since 1705. *Table*..... 643
——— Foreign, in New York, averages from 1817 to 1829. *Table* 617
——— Monthly rate of, at New York, 1825 to 1829, on France, Amsterdam, and England. *Table* 597–598
——— Rates of foreign, at Philadelphia, from 1788 to 1829, and premium on Gold from 1821. *Table*..... 611–613
——— Premium or discount on, at New York, 1825 to 1829, on the supposed ratio of 15.6069. *Table* 599, 600
——— with England generally in favor of the United States until 1821. Effect of the resumption by the Bank of England in raising (White, 1829).. 622
——— of specie of Gold and Silver forbidden in France under heavy penalties. Law of 1786..... 265, Note.
Exhibits. See *International Monetary Conference of* 1878, and *International Monetary Conference of* 1867.
Exports, British, not less in quantity in 1877 than in 1873, but 20 per cent. less in value (Giffen)..... 397

Page.
Exports, British, prices and quantities of, in 1873 and 1877 compared. *Table.* 407–408
Fall of Prices, on the. Paper by Robert Giffen (1879). See *Giffen* 389–408
Feer-Herzog. Mr. Charles, (Delegate of Switzerland). Remarks 23
——— submits United States Government documents concerning the law of 1863 (demonetization act) 24
——— remarks 25
——— opposed to an international relation between Gold and Silver 31–32
——— on export of Silver to the Indies; stock of Silver in Germany; the Indies, not Germany, the important factor 58–60
——— as a Gold mono-metallist 60–61
——— Declaration as to authority of the Delegates of Switzerland 61
——— Reply to Mr. Gibbs and remarks 79–83
——— Reply to Mr. Horton 90
——— Reply to Mr. Groesbeck 116, 118
——— Defends the action of the Latin Union in limiting the coinage of Silver 116
——— Fears increased production of the Silver mines, and declares Switzerland opposed to the establishment of an international ratio 117, 118
——— Remarks in accepting the reply to the United States propositions 166
Fenton. Mr. Reuben E., (Delegate of the United States), chosen Vice-President of the Conference 2
——— Remarks at opening of Conference, and statement of the position of the United States 3–4
——— submits list of works bearing on the Monetary question 18
——— remarks 32
——— offers statement of Coin and bullion in Treasury of the United States June 20, 1878, and remarks 48–49
——— on the duration of the Conference of 1878 95
——— remarks 136
——— presents a return of the Coinage of the United States during the fiscal year ending June 30, 1878. (Exhibit F) 136
——— address to the Conference of 1878, closing the debate 146–150
——— in the name of the American Delegation present, makes response to the reply of the European States 167
concluding remarks 169
——— letter addressed by him to various monetary authorities of Europe, and to the American Ministers at Paris and Berlin, requesting information, with responses received 219–234
——— letter to Mr. Alph. Allard, Director of the Brussels Mint 234
Five-franc piece: Silver Coin of France under law of 1803 155
——— none coined at Paris Mint from 1857 to 1865 (Feer-Herzog) 80
——— weighed and assayed at United States Mint in 1829 603
——— Silver pieces. Amount of them in France (Horton) 85
——— distribution in Belgium 179–184
——— number of, found in the 19,511 offices of account of the financial administration of France on the 14th of August, 1878 171–178
Florin: Austria-Hungary, unit of coinage, weight, &c 97
——— Netherlands, Silver, weight, fineness, &c 41
——— See *Eight-florin piece.*
Fluctuations in values of Gold and Silver chiefly caused by the want of the Gold or Silver circulating countries. (Baring, 1828) 671
——— in France seldom above $\frac{1}{10}$ to $\frac{1}{4}$ per cent 671
Foreign Coins made Legal Tender in the United States under laws of 1792 and 1834 103
Foreign Exchange, unfavorable effect of (Crawford, 1820) 536–537
Fortbonnais. François Louis Veron de, French publicist, author of the *First Report of the Committee on Coinage to the French National Assembly in* 1790 (see *Report of the Committee on Coinage, &c.*) 268
Forty-franc: French Gold piece (law of 1803) 155
——— weighed and assayed at United States Mint, 1829 603
Fould. Achille, French Minister of Finance. Report on the "Latin Union" (1865) 781–786
Four-florin Gold piece of Austria-Hungary 98
Fractional Money, Swedish Legal Tender in public treasuries 102
Franc: Monetary unit of France, weight, fineness, &c. (law of 1803) 155
——— French Silver, the unit in Swiss Confederation 190
France: favorable to the Double Standard, but expectant (see *Say, Jagerschmidt, and Ruau*) 206, 207
——— Her example in the return to a metallic currency during a revolution (Crawford, 1820) 526

Page.
France: Her interest to prefer Silver; reasons therefor (de Fortbonnais) 278–279
——— largely independent of other nations by reason of peculiar advantages securing to her a balance of trade (Hamilton) 473–474
——— Premiums paid for bullion (surachats), evil effects of (de Fortbonnais) 284
——— Silver entitled to be considered as the invariable term of comparison (de Fortbonnais) 282
——— See *Calonne.*
——— See *Exchange of Specie.*
——— See *Report of the Committee on Coinage, &c.*
——— Bank of. See *Bank of France.*
——— Coinage, free, though not gratuitous; free, probably now a right in France (Horton) 712
——— ——— of decried pieces gratuitous for three months under Louis XIV, 1679 ..... 712, Note.
——— ——— gratuitous and free for a time under the First Republic (Horton). 712
——— ——— Gold, new coinage of Gold, 1785, value, fineness, &c 153–154
——— ——— ——— Since 1793 863–864
——— ——— new coinage of Gold under law of 1803 (7 Germinal An xi.)..... 155
——— ——— since the discovery of California (Ruggles) 819
——— ——— Gold and Silver, amount of, from 1726 to 1785 (Desrotours)..... 277
——— ——— Recoinage of 1785 in 254–267
——— ——— Documents relating to the..... 264–265, note.
——— ——— An imposition on the people (Desrotours) 274
——— ——— For revenue in 1785 deprecated (Desrotours) 274–275
——— ——— Recoinages in, enumerated and commented upon by de Calonne. 266–267
——— ——— Coinage Committee of 1790 recommends that the stamp on coins shall certify to the quantity of fine metal contained in the piece 293
——— ——— a new, recommended by the Coinage Committee of 1790.. 293
——— ——— Greater in amount than any other country because of absence of paper currency (Gallatin, 1829) 591
——— Coinage system See *Gaudin; Mirabeau.*
——— Coins: comparative values of English, French, Spanish, and United States (Table) 582–583
——— ——— Table of 151
——— ——— Verification of, at the mints of France 156
——— ——— Weight and fineness. Value in United States (Moore, 1829) ... 606
——— ——— Gold, a current rate should be given them as the ratio 15½ of 1785 is too high (Committee on Coinage, de Fortbonnais, 1790). 283
——— ——— Of the Republic, sale of forbidden, likewise all contracts in (Decree, April 11, 1793) 295
——— Concurrent circulation of Gold and Silver. See *Horton.*
——— Gratuitous Coinage and abolition of Seigniorage favored by the Committee on Coinage (de Fortbonnais, 1780) 283–293
——— Gratuitous Coinage in see *Gratuitous Coinage.*
——— Mint-price and Mint-ratio since 1803, stated difference depending upon the cost of Coinage. (Horton) 686–687
——— Monetary experience under the laws of 1803, sanctioning the ratio of 15½ adopted in 1785 (Feer-Herzog) 82
——— Monetary law of 1803 (7–17 Germinal, An XI.) relating to the Coinage... 153–157
——— Monetary system, documents relating to 153–157
——— Ratio: in 1826 (Stewart) 326
——— ——— History of the ratio of 15½ 249–306
——— Ratio 15½, examined and condemned in Report of Committee on Coinage to the National Assembly of France in 1790 268–283
——— ——— Exact ratio under the law of 1785 stated 269
——— ——— Ruinous to trade (Desrotours) 273
——— ——— Sends Spanish Silver to England in preference to France (Desrotours) 276
——— ——— Disastrous effects to flow from (Desrotours) 275–276
——— ——— Injurious to French industry; proof thereof (de Fortbonnais).. 278
——— ——— Ratio, 14⅝ recommended by the Committee on Coinage, 1790, instead of 15½ of 1785 280–281
——— ——— recommended by Desrotours (1785), by advancing the value of the Gold Louis 288
——— ——— Recommended by Dutot (de Fortbonnais) 280
——— ——— A change in the, imperative in 1785 (de Calonne)..... 257
——— ——— From 1803 to 1835 (Horton)..... 686
——— ——— See *Ratio;* France.

Page.

France: Ratio, Silver, impossibility of making it reappear in circulation in 1865 (Fould) 783
Freedom of Coinage. See *Coinage.*
Gallatin. Albert, *Letter to Hon. S. D. Ingham, on the Relative Value of Gold and Silver, December* 31, 1829 589–597
Analysis.
The par of exchange between the United States and France 590
Gold rated too low under the French ratio 590
15.58 would be nearer correct in France 590
Gold bullion relatively more valuable than Silver bullion 590
Hence greater seigniorage on Silver at the French Mint 590
Relative value of Gold to Silver bullion nearly 15.69 590
This about the true average market relative value 591
Great coinage of France because of her metallic currency 591
Recent ratio of Silver bullion in England 15.82, and in France 15.81 591
About the same in the United States 592
Our ratio dependent on exchange on London 592
Gold should be slightly overrated because of unfavorable exchange 592
Spanish Dollars are of variable standard 592
Price of American Dollars in France 593
The Doubloon overrated in Havana and South America 593
Concludes that the ratio should be between 15.58 and 15.69 594
Favors 15.6069 to 1 594
Examines the objections to the use of the two metals as legal tender and considers them unfounded 595–597
The nations have always used *both* metals advantageously, and the example of England, though sustained by abstract reasoning, is not to be followed 595
The fluctuations are unimportant and need not be considered 595
May be reduced to a minimum by a correct legal ratio 595
Advantages in an alternate standard 596
The greater supply of Silver 596
England has suffered inconvenience for an abstract principle 596
Evils of her overvalued Token currency 596
Opposes a single standard of either Silver or Gold 597
——— ——— Favors the ratio of 15⅝ in 1834 (Benton) 695
Garnier. Mr., Delegate of Belgium, presents note on the Monetary System of Belgium, (Exhibi A, Fifth Session) 109
——— Declaration accepting the reply to the United States propositions 164
Gaudin. Martin Michel Charles, French Minister of Finance, 1803. Extracts from his *Second Report on Coinage, 26 Brumaire, An XI* 300–305
Analysis.
Gold Coins, one third of the specie of France 300
Necessary to be retained in the circulation 301
Money goes abroad as merchandise 301
Gold coins should receive a fixed value by law 301–302
The ratio between Gold and Silver should be established with reference to that of neighboring nations 302
Ratio in England is about 1 to 15 303
This would be a proper ratio for France 303
Ratio of 15½ entails no serious inconvenience, and a change to 15 would involve enormous loss to holders of Gold 304
Monetary unit should be Silver 304
Cost of Coinage not to be put upon the government 305
German Commercial Convention of 1868 favoring Monetary unity in the German States, single Gold Standard and Decimal system 727–728
German Imperial Bank (Reichsbank): Report of the United States Legation at Berlin concerning the, its establishment, functions, privileges, &c. 223
——— not limited as to amount of its note issues 224
——— required to hold one-third of its note circulation in current German money 224
——— Amount of note issues 224
——— Capital, &c. 224
——— Summary of business 225
German States, Coinage Treaties, list of 779
Germany: invited by the Conference to attend its deliberations 33
——— declines invitation 70
——— Influence of her stock of silver for sale on market price; opinion of Mr. Say 56
——— Coinage: gold, amount of her recent gold coinage (Giffen) 391

Page.

Germany: Coinage, Gold and silver, amount of, and stock of silver on hand, (Soetbeer, 1878) 729–731
——— Silver coins, amount per capita in the Empire 730–731
Gibbs. Mr. Henry Hucks, (Delegate of Great Britain). Remarks 23
——— in reply to Mr. Feer-Herzog as to the influence of the German stock of silver on the market price 71–73
Gibraltar, Currency in 38
Giffen. Robert, *Paper on the Fall of prices of Commodities* (1879) 389–408
Analysis.
In late years there has been a heavy fall 389–390
The extent thereof stated 390
One of the causes, the demand for Gold in Germany and the United States 391
The Gold-supply deficient 392
Has been decreasing since 1852 393
Increase of Population and Wealth and extension of Commerce require more gold 394
The demand has begun to bear upon existing stocks of gold, causing a fall in values 395
Economising expedients not sufficient 395
A uniform progress in the demand for Gold to be expected 396
Prices must adjust themselves to the smaller supply of Gold 396
British exports in 1877 not less in quantity than in 1873, though 20 per cent. less in value 397
Gold and Silver have both changed 398
The fall in wages 398
Effect of the appreciation of Gold 399
Introduction of £1 notes suggested 400
Other nations should retain their small notes 401
Silver-using countries should not substitute Gold 401
Gold: Appreciation, effects of (Giffen) 399
——— of California and Australia, most of it went to the French Mint (Society of the Netherlands, &c.) 187
——— Tendency of nations to overvalue, in relation to Silver (Horton) 240
——— its use among the Nations increasing, and its price likely to rise (de Calonne) 262–266
——— the Money of foreign Commerce, less needed by France than Silver (Desrotours) 271
——— is convenient Money for England 271
——— more variable than Silver (de Forbonnais, 1790) 282
——— its overvaluation in England prior to 1717 had caused Silver to be exported (Caswall) 315–316
——— portable, but paper still more so (Morris, 1782) 428
——— is liable to fraudulent practices 428
——— not less liable to fluctuations than Silver (Ingham, 1830) 576
——— English "deceptive" prejudice in favor of (Ingham, 1830) 579
——— circulation, Gold does not circulate freely with bank-paper and Silver (Ingham, 1830) 575
——— Rise of the Silver price of, from 1770 to 1830 of 8 per cent. as shown by comparative tables (Horton) 701–703
——— price of. See *Price.*
——— price. See *Ratio.*
——— Production, great production of, from 1850 to 1856 easily disposed of (Groesbeck) 114
——— ——— decreasing (*Table*, 1852–1875) 393
——— ——— throughout the world, 1852–1875, showing quinquennial averages and steadily decreasing production *Table* 406
——— ——— See *Gold and Silver:* Production.
——— sales of, in London in 1821–1822, with charges, &c. *Table* 618
——— supply of, latterly not equal to the demand (Giffen, 1879) 392
——— value, rising throughout the world (*Bullion Report*, 1810) 366
——— The Portuguese and Spaniards have raised the value of (Desrotours) .. 270
——— Increased value of, from English demand for resumption. (Baring, 1828) 671
Gold coin not a legal tender in British India 36
Gold coins of the world, weight, fineness, &c., *Comparative Table* 9–10
——— in different countries, relative fineness of (Hamilton, 1791) 466
——— British, how rated in United States. See *John Quincy Adams.*
——— 20-franc and 10-franc pieces, their distribution in Belgium 179–183

Page.
Gold Coins: France (law of 1803) 155
——— ——— 40-franc, 20-franc, and 10-franc pieces found in the 19,511 offices of account of the financial administration of France on the 14th of August, 1878 171–177
——— ——— Legal Tender in Swiss Confederation 190
——— ——— See *England.*
——— ——— Recoinage of. See *Recoinage.*
Gold Dollar, unit of value in the United States since the law of 1873 104
Gold-Mono-Metallism: in Europe must mean a principal circulation of debased Silver (Walker) 76
——— Causes which led to the policy of, in England (Horton) 353
Gold Standard, the Netherlands forced to adopt (Society of the Netherlands, &c.) 185
Gold and Silver: used as money, not by agreement, but because they are fittest, and independent of the will of the legislator (Berenger, 1802) 724–725
——— circulation: circulated together in France for many years after 1726 (de Calonne) 261
——— coin held by the Bank of France from 1868 to 1878 222
——— Consumption for other objects than circulation and from wear of coins (White, 1829) 625
——— Demand increased by legislation which fixes their Legal-Tender quality, and sets in motion the force of self-interest (Horton) 704
——— Production: quantity of extracted from the mines of America from 1492 to 1803 (Humboldt) 650–652
——— ——— Amount extracted from the mines of America from 1492 to 1825. *Summary.* (Humboldt, Abbe Raynal, Mr. Ward, Bullion Report) 654
——— ——— Average annual product of the world, 1761–1830 (Soetbeer) 702
——— ——— See *Production.*
Goschen. Rt. Hon. George J., (Delegate of Great Britain), offers Report of Inquiry in England in 1876 into the depreciation of Silver, and Manuscript Note on the Currency Systems of the British Empire 18
——— Remarks 23
——— Declaration respecting Great Britain's position 32
——— Remarks 47, 48
——— Explanation 49
——— Inquiry concerning powers of United States Delegates 50
——— Defines position of the English Delegates, and expresses his views 50, 52
——— Remarks 70
——— The limiting of the mintage by the Latin Union had contributed to the depreciation of Silver 93–94
——— Remarks 150–151
——— Accepts the Reply to the United States Propositions, but declares against any construction in favor of the Double Standard 165–166
——— Remarks at close of Conference of 1878 169
Gratuitous coinage: what it means; England the first nation to make coinage gratuitous and free (Horton) 711
——— England: of Silver and Gold; English Statute of 18 Car. II., c. 5 309
——— ——— Statutes continuing same in force enumerated 312
——— ——— Statute 1 Geo. III., c. 16 312
——— ——— Re-enacted 8 Geo. III., c. 1 314
——— ——— Re-enacted in perpetuity 9 Geo. III., c. 2 (1768) 314
——— France: gratuitous coinage and abolition of seigniorage favored by the committee on coinage (de Fortbonnais 1790 283–293
——— decreed by law of 8th Frimaire An IV. (1796) 296
Great Britain: Association of Chambers of Commerce of the United Kingdom advocates 25-franc piece for international coinage 383
——— Coinage, Gold, in, since 1816 863–864
——— Coins of, weight, fineness, &c. Value in United States (Moore, 1829) .. 606
——— Currency systems 35–40
——— Ratio, lowering her ratio. See *England.*
——— See *England.*
Greece in accord with France on the question of standards 207
——— See *Delyanni.*
"Greenbacks." See *Paper Money.*
Groesbeck. Mr. William S., (Delegate of United States), suggestion at close of first session 6
——— Declaration of, as to objects of the Conference, and views of United States 19–22

Page.

Groesback. William S., historical *résumé* respecting United States legislation concerning coinage and ratio 21
——— Explanations..... 23
——— Reply to Mr. Feer-Herzog 25
——— Remarks 26
——— on Resumption in the United States..... 48
——— Remarks 49
——— on powers of United States Delegates 50
——— Address to the Conference 109–115
Urges concurrent action by the nations towards the restoration of Silver. 111
Surveys the field in the light of past events 112
And concludes that the present time is favorable for action 114–115
——— Offers two letters from Mr. Sherman, Secretary of the Treasury (Exhibits C and D); letter from Mr. Linderman, Director of the Mint (Exhibit E) 139–140
——— Requests an adjournment..... 150
——— Further remarks..... 151
Guiana, British, Single Gold Standard in..... 40
Guinea, British Gold Coin: its value last adjusted in 1717 (Desrotours)..... 271
——— Too high, in opinion of M. Magens..... 271
——— Reduced to 21 shillings by Address of Parliament to the King and Royal Proclamation, 22 December, 1717 (see *Sir Isaac Newton*)..... 316
——— Value in United States in 1776 422
——— Base, coined in Birmingham in 1782 (Morris) 427
——— French, value in United States in 1776 422
Gurdon. Mr. William Brampton, Adjoined Delegate of Great Britain to the Conference, invited to take his seat 18
Half-Imperial, Gold Coin of Russia, fineness, weight, &c..... 99
Half-Johannes (Gold), value in United States in 1776..... 422
——— ("Half-Joe") Portuguese gold, weight, &c ..... 439, note.
Half-Sovereign, British Gold, weight, fineness, coinage, &c 35
Hamilton. Alexander, Secretary of the Treasury of the United States, referred to by Mr. Feer-Herzog 81
——— in favor of simultaneous employment of Gold and Silver (Horton) 87
——— Gold not undervalued by him in 1792. (C. P. White, Report of Committee, 1832)..... 675
——— Extract from *Report on the Mint*, 1792. Opposed to attaching the Unit to either Gold or Silver, for fear of reducing one or the other metal to a mere merchandise. The quantity of circulating medium should not be abridged..... 106
——— *Report on the establishment of a Mint.* (1791)..... 454, 484

Analysis.

The depreciation of the Dollar, and the unequal values of coins of the same intrinsic worth in different parts of the Union, call for a Mint.. 455
Particulars of the discussion stated 456
The Pound is the Unit of account 456
The Dollar (old Piaster of Spain) seems to be the unit in the coins..... 456
But the unit may have been attached to Gold 456
Weight, &c., of Spanish Dollars, and a new Dollar suggested..... 457
The customary ratio in the United States between Coined Gold and Coined Silver is 1 to 15.6 458
Considers Gold overvalued compared to the *actual proportion* in Europe. 458
And that 1 to 15 would be the true mean..... 458
Not clear whether the unit is of Silver or Gold..... 459
Neither of the metals should be preferred for the Money Unit 459
If either, Gold rather than Silver 459
Gold may perhaps have greater stability than Silver..... 459
Fluctuations will be rather in the value of Silver..... 460
Silver should not be encouraged merely because its weight favors Bank Circulation 460
The latter rather an auxiliary to than a substitute for the circulation of the precious metals 460
Reducing one money-metal to a mere merchandise a greater evil than the fluctuations in the relative value of the metals 461
The quantity of circulating medium should not be abridged 461
Effect of overvaluing one of the metals the banishment of that which is undervalued 463
The diminution of the quantity of specie in a country 463
Local circumstances vary the operation of general principles..... 464

Page.

Hamilton. Alexander,—Continued.
The ratio in Holland in 1789, and in London 465
1 to 15 recommended by the condition of our trade 465
The legal should approximate the market proportion 465
One-twelfth alloy advocated for Gold and Silver 466
Fineness of the Gold coins of different nations 466
Fineness of the Silver coins 466–467
Alloy in coins considered 467
The question of Free Coinage 467
Mint-charges in France and Holland 467–468
Defraying the Coinage by degrading the unit inadmissible 468
Diminishing the metal in the coins would disturb the balance of intrinsic value and affect prices 468
Prices would rise 469
The attendant evils 469
Second method of defraying coinage-expenses examined and preferred. 469–474
In connection with the balance of trade and foreign exchanges 469–474
France a peculiarly favored country 473
Having commonly a favorable balance of trade, correcting errors of her Mint system 474
Arguments for and against free coinage considered 474–478
Market price of Gold bullion in London is slightly lower than the coin value, notwithstanding free coinage 475
Advocates difference of one-half per cent. between the coin value and the Mint price of bullion for each of the metals 476
A larger proportion of alloy deprecated 476–477
The unit in Gold and Silver stated 478
Proposed coins of the United States (Decimals) 479
Advocates half-cents 479
Suggests Dollar or Unit, Dime or Tenth 480
Thickness desirable in the Gold piece 480
Does not favor a coinage of *Billon* 481
Foreign coins to circulate temporarily 481
Uniformity between the Unit of Weight and the Coin Unit difficult of attainment 482–483
The Personnel of the Mint suggested 483
The Remedy of Weight and Alloy 483–484
Hengelmüller. Mr. C. von, (Delegate of Austria-Hungary). Declaration as to his authority 52–53
Hoffmann. J. G., (*Doctrine of Money and Signs of the Times*, 1838–1840), referred to by Mr. Horton as the progenitor of the Gold movement in Germany ..... 703 and note.
——— Fluctuations of Gold, slight even under the enormous English demand for resumption (quoted by Mr. Horton) 706
Holland: divided in opinion at the Conference of 1878 (see *Society of the Netherlands, Vrolik and Mees*) 208
——— had Gold as the invariable term of comparison in the 18th century (de Fortbonnais) 282
——— Coins of; fineness, weight, and value in the United States (Moore, 1829) 607
——— ratio (Desrotours) 272
———. See *Netherlands*.
Honduras, British, Currency in 40
Hong-Kong, the Silver Dollar sole unlimited Legal-Tender. Currency at, &c. 38–39
Horton. Mr. S. Dana, Adjoined Delegate of United States to the Conference. Introduced by Mr. Fenton 17
——— Reply to Mr. Say 26
——— Remarks on stock of Gold in United States for resumption 48
——— Remarks 49
——— Address before the Conference of 1878 84–88
——— Remarks 91, 94
——— Note on the Monetary legislation of the United States, circulation, &c., and Coinage 103–105
——— Reply to Mr. Pirmez and address 127
——— That Monetary laws can create a demand 128
——— Mr. Goschen really upon bi-metallic ground 134
——— A single Gold Standard in Europe an Utopia 134
——— "Historical Material for and Contributions to the Study of Monetary Policy, selected and presented" by 235–878

Horton. S. Dana, letter to Hon. William M. Evarts 237
——— Introductory to the study of Monetary Policy 239–246
——— Introductory to "The Ratio of 15½ in France" 249–253
——— Was the legal ratio of 15½ in France in 1785 and 1803 created arbitrarily, or was it the recognition of an economic fact? 249–253
——— Note on de Calonne 254
——— Concerning the "Livre tournois" 256
——— Concerning the "Paris pound" 258
——— Market price of Gold in Paris after 1779 259
——— Concerning the price of Louis d'or 260
——— Note, page 262
——— Note-memorandum of Documents relating to the French recoinage of 1785 264–265
——— Note on the first Report to the National Assembly of France, from the Committee on Coinage in 1790 268
——— Note on de Fortbonnais 268
——— Note 271
——— Note on the French Decree of October 8, 1790 293
——— Note on Gratuitous Coinage Laws of France 294–296
——— Statement of the Coinage System of Mirabeau 297–299
——— Note on Gaudin 300
——— Note on Mirabeau the elder 304
——— Conclusions to the French Historical Contributions. No evidence that 15½ was the market ratio in 1785 306
——— Hamilton's adoption of 15 in the United States in 1791 justified by the facts as shown in the Report of the French Assembly Committee on Coinage, and admitted by the Finance Ministers under Louis XVI., and under Napoleon 306
——— Note to Sir James Steuart 324
——— A correction of certain expressions of Mr. Feer-Herzog concerning the Monetary History of England, and letter to him. *Note to* 345–349
——— Introductory to *"The Bullion Report and the Silver Question"* 351–364

Analysis.

The Gold mono-metallism of Lord Liverpool criticised 351–364
The Gold Standard makes no adequate provision for Silver 355
It tends toward disruption of the world's valuations 355
The question of Gold *vs.* Silver was not fully argued in England in 1798, 1810, or 1816, and yet is considered *res adjudicata* 361
Facts ignored by the Bullion Committee 363
Ignorance of the Silver Coinage Prohibition act of 1798 364
——— Note on the expenditures of the British paymasters abroad from 1805 to 1810 372
——— Note on the early law of Legal-Tender in England, on the statutes Providing for the free coinage of Silver, and on the "Standard of Elizabeth" 373, 374
——— Note on the replacement of paper by Gold in England 380
——— The rise in the value of Gold in England 385–387
——— A formidable rise has taken place, estimated at 20 per cent.; contraction of the world's metallic circulation must stop; a Bi-metallic Union is necessary; the supposed steadiness of Gold an error 385–387
——— Note on the first legislation respecting the ratio in the United States, 1776 422
——— Note on the legal ratio inferred from Robert Morris's Ordinance of 1782. 434
——— Note on Mr. Jefferson's Notes on the establishment of a Money Unit 437
——— Note on the "Half Joe" 439
——— Note on the Coinage Systems of Osgood and Livingston 449, 450
——— on the Mint charge in the United States in 1786 ..... 452, Note.
——— Note on Legal-Tender for fractions of payments 453
——— Note on Hamilton's selection of the ratio of 15 in 1791 460–462
——— Hamilton fully justified in his choice by the prevailing ratios in other nations, notwithstanding the extreme overvaluing of Gold in Spain and Portugal 460–462
——— Note on the Official Par of Exchange with England and criticising Report of Mr. Adams 493, 494
——— on the Report of Mr. Lowndes in 1819, relative to a change of ratio in the United States, and Seigniorage on Silver coins 502
——— Note on error in Resolution of Congress August 8, 1786, in the value of the pound of Silver 561
——— Note on Professor Soetbeer and the London Tables of ratios 649

Page.

Horton, S. Dana, the motives for the adoption of the ratio of 16 in the United States in 1834-'37.

Analysis.

Utterances of Thomas H. Benton and the leaders in Congress in rejecting the proposed ratio of 15.62, using the argument from the high ratios in the Spanish and Portuguese countries instead of the general ratio of the world's demand 685
The yield of the Southern Gold fields a motive to raise the rating of Gold 686
The ratio of 16 a delusion 686
15.62 meant unity with France 686
Mint price now differing from Mint ratio. *Note* 686-687
Advantages that would have attended a unity with France 687-688

——— The rise of the Silver-price of Gold between 1770 and 1830, and its causes.

Analysis.

There was a rise of Gold of 8 per cent 701
Reasons for considering it a rise of Gold and not a fall of Silver 701, 702
The cause not in the alteration of the supply but in the demand for use as Money 702
War demand gives a preference for Gold 703
But not sufficient to account for the advance 703
The law of 1798 in England stopped the coinage of Silver rather than the preference for Gold 703-704
The forces of legislation in fixing the quality of Legal-Tender increase the demand and act upon the entire force of individual self-interest. 704
Various great acts of legislation about 1800 ..... 704, 705
These acts tended to bring about a rise in Gold 705
The high ratio of Spain seemed to justify the raising of the French ratio in 1785 705
In England the rise in 1798 brought Silver to the Tower to be coined, and then Silver was proscribed 705
After 1803 the influence of France, with free coinage at the mint-rate of 15.69, tended to raise Gold permanently to that ratio 705
England's resumption of specie payments raised the value of Gold 705
The French Bi-metallic System kept up the equilibrium by furnishing Gold to England and keeping Silver in France, thus steadying the exchanges 706
Reasons for the extraordinary steadiness in the price of Gold at that time as observed by Hoffmann 706, 707
England's demand was for Gold at any price, that of the Bi-metallic countries only for Gold up to their respective ratios 707
The shortsighted policy of the Gold-favoring legislation 707
Dr. Soetbeer's Tables of Sales of Gold in Hamburg from 1700 to 1832 708

——— Free and Gratuitous Coinage in France and England 711-713
(See *England, France.*)

——— Concurrent circulation of the two metals in France under the ratios of 14⅝ and 15½ 715-717

Analysis.

To secure this end the various French ratios were adopted 715
Under the ratio of 14⅝ (1726) France enjoyed concurrent circulation. (Quoting de Calonne and Gaudin) 715-716
Which England did not, because of her high ratio, 15.21 at that time .. 716
The Bi-metallism of the United States, because of our small stock of specie, and our ratio conflicting with the French, has not aided in maintaining the steadiness in the relative value of the metals 716
The events stated which disturbed the par guaranteed by the French Bi-metallic free coinage 716
Facts showing that Silver did not entirely disappear in France between 1855 and 1865 ..... 716, 717

——— The Theory of Mono-metallism in 1802, and extracts from the Second Report of Citizen Berenger on Coinage; Berenger an able advocate of the Single Standard (see *Berenger*) 723-726

——— The German Commercial Convention of 1868. The enthusiasm for the Gold Standard the product of a literary agitation 727

——— Partial list of Modern Publications on the subject of Money 737-773

——— Sources from which the list is made up 739

——— Importance of the body of Law and Legislation affecting the subject of Money 741, 742

Page.

Horton. S. Dana, the Position of Law in the Doctrine of Money 741–757

Analysis.

The importance of law 741
That Gold and Silver are commodities, and nothing else has been regarded as an admitted truth 742
That the choice of a Money unit is analogous to the choice of a unit of weight 742
Hence that Gold, the lighter, the nobler metal, should be the choice ... 742
The United States, by proposing to Europe concurrent coinage of Silver and Gold, proclaim that human law is a factor 743
The persecution of Silver is an attack against the steadiness of purchasing power of the World's Money; the remedy is alone in concurrent monetary legislation 743, 744
Necessity of a reformation of monetary science 744
Civil Society means something artificial, arbitrary, official; Money a constituent factor in the evolution of Society 746
Taxes, tribute, and penalties, with their enforcement by the State 746, 747
The power which demands makes the Legal Tender 747
Commerce has created a *medium of exchange*, and from convenience uses the same commodity as Money 747
The Money of Commerce and the Money of the State are materially one, though the origin of the unity is twofold 747, 748
Legislation creating Legal Tender affects the demand for the commodity selected 749
Through the Mint-stamp the commodity bullion becomes the commodity Money, with enforcible debt-paying power 749
But this stamp is not all, any more than the uniform is the soldier 750
"It is impossible to establish an unalterable ratio between the two metals" is as true as that "it is impossible for a man to draw a line absolutely straight" 751
Nevertheless machinery and engineering-works are successfully made with substantially straight lines 752
And no statesman should be deterred by the so-called impossibility of a fixed ratio 752
The unit of valuation must be preserved in its purchasing power 752
There is no real "standard of value," only an *instrument of valuation*, under the influence of supply and demand, and which must be under the constant protection of wise laws 753
The position of law is that of a regulator 753
Its force is persistent like gravitation 753
A statute, like a granite boulder, does not lose its weight by lying still. 754
In the floods of Californian and Australian Gold, English and French statutes might have outlawed Gold 754
The statutes maintaining Gold in its Monetary privileges saved Gold, or it would have been where Silver is to-day 754
An enactment of one nation in opposition to the stronger laws of another nation will fail of its object 756
Its influence upon demand or supply is a question of fact 756
At present, in the interest of Bi-metallic Union, the United States should coin no Silver 756
Free Coinage here, while Europe rejected Silver, would mean Silver Monometallism and a temporary success for Gold-Monometallism in Europe 756
We should coin only Gold, but exert a vigorous Bi-metallic influence to convince Europe, by the logic of disaster and argument, of the necessity of the concurrent restoration of Silver 757
Money is an institution of the world, and must be studied as a whole .. 757
——— treaties for interchangeable currency 777–780
——— their object, a fusion of currencies or mutuality of Legal Tender 777
——— the policy of the United States, under the law of 1878, convoking the Conference, looks to the guarantee of the equality of the metals, and the contracting parties might retain their national Coins 778

Humboldt. Alexander von, estimate of the production of the precious metals (White) 626–627
——— Statement of the quantity of Gold and Silver extracted from the mines of America from 1492 to 1803 650–652

Imperial Russian Coin. See *Half Imperial.*

Page.
India. British, Government of. Resolution (1876) ... 411–413
——— A fall in the value of Silver not to be assumed; prices do not indicate it; rise in the value of Gold; three causes for the divergence of the Metals stated ... 411–413
——— The equilibrium preserved by the two metals having been used for Legal-Tender Money ... 412
——— Free Coinage of Silver to continue. The standard of value not to be interfered with ... 413
——— Suspension of Silver coinage in, favored by Calcutta Trades Association (August, 1876) ... 411
See *British India.*
India Trade, effect of, in lessening the demand for Silver (Ingham, 830) ... 562
Ingham. S. D., Secretary of the Treasury of the United States. *Report respecting the relative value of Gold and Silver* (1830) ... 558–581.
Analysis.
Supply and Demand govern the value of the precious metals ... 558
But political regulations affect the demand ... 559
Weight and fineness of metal formerly only the measure ... 559
The debasement of the English Coin ... 559–560
Of the German, French, and Spanish ... 560
The money-unit, the Dollar of 375.64 grains, originated with Mr. Jefferson in 1782 ... 560
Mint-charge under the Resolution of 1786 ... 562
The weight of the Eagle and Dollar under the law of 1792 ... 562
The India trade has lessened the demand for Silver ... 562
Supply and Demand regulate the value of Gold and Silver ... 563
The present English mint and market prices and the resulting ratios ... 564
Comparison between payment by bill of exchange and shipment of specie ... 564
Gold commanding a premium in the United States within the last eight years, and the premium which can be borne by Gold before Silver can be shipped ... 565
Fluctuations in the premium owing to the fluctuation in the values of Gold and Silver in England ... 565
Average market ratio for ten years in England 15.8 ... 565
Monetary system of France affords the best lights ... 566
Her Coinage stated in United States Coin values, ratio 15.5 ... 566
French mint charge raises the ratio of the mint price to 15.69 ... 567
Gold can bear a premium raising the ratio to 1 to 15.82 before Silver can be exported to France ... 567
Average ratios in England and France stated ... 567
Effects of restriction against exportation of Gold and Silver ... 567
France and England reflect the influences controlling the values of Silver and Gold in the world ... 568
Not proper to change the mint value of the metal which has been rated too high ... 568
Contracts in the United States made on the mint value of Silver ... 568
The easier change would be in the value of the Gold ... 568
But the metals fluctuate beyond control ... 568
The new demand for Gold in the United States would create a new ratio in other countries ... 569
"A conventional agreement between the nations desiring to use both Gold and Silver as Standards of value, fixing the same relative values, might avert such consequences" ... 569
A relief possible in the single standard ... 569
France keeps both metals in circulation, and her demand, in great measure, controls their relative values ... 569
Little reliance to be placed on artificial regulations (citing English history) ... 569–570
The vibrations of value cause the alternate expulsion of each of the metals ... 570
Quotes Lord Liverpool upon the one metal Standard ... 571
Considers mint-price and market-price ... 572
Objections to a charge for coinage ... 572–573
Withdrawal of specie checks over-trading ... 574
A small charge to cover expense of Coinage advocated ... 575
Bank paper supersedes the use of Gold ... 575
The ratio not the cause of the non-circulation of Gold prior to 1810, the English ratio being lower ... 576

Page.

Ingham. S. D.—Continued.
Silver the preferred metal for our currency 576
Silver should be protected from export by a low mint-value for Gold.. 576
If a change is made in the ratio, we should conform to the regulation of France 576
Argues in favor of a single standard 577
The relative values cannot be fixed by law 577–578
Two Standards futile; mint regulations cannot keep Gold and Silver together 578
Defects of the English system of one standard for small and another for large payments 578–579
English "deceptive prejudice in favor of Gold" 579
Debased Silver token Coinage an imposition 579
Silver ought to be the Standard measure in the United States, and maintained as the chief material for metallic currency 579
But if there were no paper convertible into the Standard, Gold coins would be almost indispensable 579
Advocates the French ratio, although below the actual relative value, so as to preserve Silver 580
Concludes in favor of 1 to 15.625 as the ratio 581
—— Circular of Inquiry respecting Foreign Coins—weights, market values, &c., of same; rates of Exchange; cost of transporting Coin and Bullion; premium on United States Coins; exportation of United States Coins; premium on Gold and Silver in England during suspension; relative value of Gold and Silver 602–603
International agreement concerning unrestricted Coinage of Silver, unlimited Legal-Tender Money of Gold and Silver, and a common ratio proposed by the United States at the Conference of 1878 (see *Propositions, &c., of United States*) 213
International Monetary Conference of 1867:
—— Largely responsible for the subsequent rejection of Silver (Walker)... 74
—— Invitation of France to the United States to join the. (Letter from M. Berthemy, French Minister at Washington, to Hon. William H. Seward, Secretary of State, May 27, 1867.) 799–800
—— Acceptance by United States: Letter of Mr. Seward 800–801
—— Report of the 803–878
—— Members present 805–806
—— Questions proposed for the consideration of the Conference 811–812
—— "Only a seed sown, the germination of which cannot be foreseen." (de Parieu) 830
—— Coin to be adopted. Debate 855–860
—— —— Mr. Ruggles desires the 25-franc piece 856–861
—— —— "The Twenty-five franc piece as an International Coin." Adopted by the Conference unanimously, Prussia and others not voting 858
—— —— Prussia declines to vote on the question of the Coin 858–859
—— —— Debate on the 15-franc piece 858
—— —— Vote on its adoption a tie, six States not voting 860
—— —— "Coins with the common denominator of 5 francs to have legal circulation in the States that are mutually bound by the Monetary Convention." Adopted by the Conference unanimously, England and others not voting 857
—— Common denominator for proposed International Coinage, debate on the 848–855
—— —— Whether the 5 or 10 franc piece? 853
—— —— Platina suggested by M. Jacobi 854–855
—— —— of 5 francs adopted by the Conference, 13 to 2, England and Sweden voting No, Prussia and others not voting 855
—— Communication, official, by France to the several states of the result of the labors of the Conference; answers desired before a fixed date; a new conference to be called by the French Government if necessary. Adopted by the Conference unanimously 870–871
—— Control over the International Coinage, as proposed by Baron de Hock, approved unanimously by the Conference 860
—— —— Baron de Hock's principles as above, set forth 865–866
—— "Creation of a system altogether new." Advocated by Mr. Stas (Delegate of Belgium), with a metric unit of Gold 815
—— —— This in the interest of England and the United States 816
—— —— Decided in the negative by the Conference 821

Page.

International Monetary Conference of 1867—Continued.
——— Declaration of Mr. Rivers Wilson concerning the position of England's Delegates at the Conference. They are simply to listen, to study, and to report ... 844
——— "Diplomatic conventions" hoped for by the unanimous vote of the Conference ... 869
——— "Exclusive Gold Standard, leaving each state the liberty to keep its Silver Standard temporarily." Adopted by the Conference, the Netherlands voting No ... 832
——— Single Standard of Gold the basis of a monetary union:
(Feer-Herzog) ... 824
(Baron de Hock) ... 824
(Wallenberg) ... 827
(Broch) ... 829
——— Single Silver Standard. Rejected by the Conference ... 827
——— ——— "Countries that have had the Silver Standard, as well as those of the Double Standard, must stipulate that the relation between the value of Gold and Silver shall not be established at a rate too low to permit the serious introduction of Gold" ... 840
——— ——— Adopted by the Conference, Prussia and the United States not voting ... 841
——— "A mutual co-ordination of existing systems:"
——— ——— Advocated by Mr. Mees (Delegate of the Netherlands) ... 812
——— ——— Also by Count d'Avila (Delegate of Portugal), with one Standard of Gold ... 812–813
——— ——— Favored by Baron de Hock (Delegate of Austria) and M. Feer-Herzog (Delegate of Switzerland) ... 814
——— ——— Theoretic metric solution impracticable ... 814
——— ——— M. Jacobi (Delegate of Russia) adopts the views of M. Feer-Herzog ... 815
——— ——— Metrical proportion not indispensable (Feer-Herzog) ... 817
——— ——— M. Meinecke (Delegate of Prussia), urges the necessity of adopting a system already recognized ... 816
——— ——— Prussia content with the Silver Standard ... 816
——— ——— M. Broch (Delegate of Norway), favors the already-existing system of the Latin Union ... 818
——— ——— Mr. Ruggles (Delegate of the United States), thinks the United States would reduce the Dollar ... 819–820
——— "Mutual Co-ordination" decided in the affirmative by the Conference. 821
——— Ratio. Debate on the proposed, during the transition to the proposed Single Gold Standard ... 835–841
——— ——— Arguments in favor of a limited minimum of relation so as to draw Gold into circulation and expel Silver ... 835–841
——— ——— Limited minimum not fixed ... 841
——— Report of M. de Parieu. Sums up the results arrived at by the Conference, and lauds the ascendancy of Gold because of its "portability and density" ... 871–877
——— System of the Monetary Convention of 1865 (Latin Union), favored by the Conference as a basis of Monetary unification ... 821
——— "Types with a common denominator for weight in Gold Coins of identical fineness." Adopted by the Conference ... 852
——— Weight and Fineness, and identity of fineness of proposed International Coinage, debate on the ... 845–852
——— ——— Nine-tenths adopted as the International Fineness by the Conference ... 852

International Monetary Conference, 1878.
First Session, August 10 ... 1–14
——— Exhibit A: Figures useful in the study of the Monetary Question, by Dr. O. J. Broch ... 7
——— Exhibit B, First Session: Diagram showing quotations of Silver in London, 1873–1878 ... 13
Second Session, August 16 ... 17–44
——— Exhibit A: A statement of the Currency Systems of the United Kingdom, its Colonies and Dependencies (presented by Mr. Goschen) ... 35–40
——— Exhibit B: Note on the Money System of the Netherlands and Colonies (Mr. Mees) ... 41
——— Exhibit C: List of Documents and Treatises on the Monetary Question, presented to the Conference by Mr. Fenton ... 42

Page.

International Monetary Conference, 1878—Continued.
Second Session, Exhibit D: (Presented by Mr. Feer-Herzog.) Extracts from Report and Correspondence of John Jay Knox, Deputy Comptroller of the Currency, transmitted to the United States Senate April 25, 1870, relative to the exclusive Gold Standard . 43
——— Exhibit E: Note concerning the causes which led the Russian Government to suspend the coinage of Silver 44
Third Session, August 19 47–65
Fourth Session, August 22 67–106
——— Exhibit A: Note on the Monetary system of Austria-Hungary .. 97–98
——— Exhibit B: Note on the Monetary Legislation of Russia 99–100
——— Exhibit C: The Scandinavian Coinage system, by Dr. O. J. Broch 101–102
——— Exhibit D: (Presented by Mr. Horton.)
——— ——— I. Note on the Monetary Legislation of the U. S. of America, the present state of their fiduciary circulation and upon their coinage from 1792 to 1877 103–104
——— ——— II. Statement of the circulation in the U. S. 104–105
——— Exhibit E: Extract from the Report of the Mint of Alexander Hamilton, Secretary of the Treasury of the U. S., 1792 106
Fifth Session, August 26 107–141
——— Exhibit A: Note on the Monetary System of Belgium 137
——— Exhibit B: List of Legislative Documents concerning the Kingdom of Italy 138
——— Exhibit C: Letter of John Sherman, Secretary of the Treasury of U. S., to Mr. Wm. S. Groesbeck, July 15, 1878 139
——— Exhibit D: 2nd letter from John Sherman, Secretary of the Treasury, to Mr. Wm. S. Groesbeck, July 15, 1878 139
——— Exhibit E: Letter from A. R. Linderman, Director of U. S. Mint, to Hon. W. S. Groesbeck, July 19, 1878, relating to the Japanese "Yen" or Trade-Dollar 140
——— Exhibit F: Statement of Coinage executed at the Mint of the U. S. during the fiscal year ending June 30, 1878 (presented by Mr. Fenton) 141
Sixth Session, August 28th 143–157
——— Exhibit A: Documents relating to the Monetary System of France:
Declaration of the King fixing the value of Gold relatively to Silver, with an ordinance for a new Coinage of the Gold Coins, October 30, 1785 153–154
Monetary law of 1803 (7–17 Germinal, An XI.) 155–156
Synoptical table of French Coins 157
Seventh session, August 29 161–193
——— Exhibit A: *Investigation into the Monetary Circulation in France:*
——— ——— Table I. Giving the number of 20-franc and 10-franc Gold pieces, and of Silver 5-franc pieces found in the 19,511 offices of account of the financial administration of France on the 14th August, 1878 171–172
——— ——— Table II. Showing the foreign 20 and 10 franc Gold pieces found in same at same period 173–174
——— ——— Table III. Giving origin of foreign Silver 5-franc pieces, found in same at same time 174–175
——— ——— Table IV. Showing the number of 30-franc pieces coined in France from 1803 to 1878, and the number found in the above offices on the date given 176
——— ——— Table V. Showing the number of French Gold 10-franc pieces coined in France (1850–1869), and number found in the above offices on the date given 177
——— ——— Table VI. Showing the number of Silver 5-franc pieces coined in France from the year IV. to 1878, and the number found in the above offices on the date given ... 178
——— Exhibit B: *Investigation into the Monetary Circulation in Belgium.* 179
——— ——— I. Distribution of coins according to their origin 180
——— ——— II. Proportion of Belgian and French coins according to their date 181–184
——— Exhibit C: Address of the Society of the Netherlands for the Promotion of Industry to His Majesty the King (translation by Hon. Geo. Walker) 185–189
——— Exhibit D: Note on the Monetary Legislation and on the fabrication of the money in the Swiss Confederation since 1850 190–191

Page.

International Monetary Conference, 1878—Continued.
Seventh Session, Exhibit E: Documents relating to the Coinage in the Scandinavian countries, &c 192
American Commissioners' Report, Appendix 217
International Monetary Conference urged by the Society of Netherlands, &c. 188
Italy, Delegates of, at Conference of 1878, declare that International Legislation could establish the relation of value between Gold and Silver. 164–165
——— Favorable to the double standard (See *Rusconi and Baralis*) 207
Jagerschmidt. Mr. Henri, appointed one of the Secretaries of the Conference. 2
——— Remarks 32
——— Remarks concerning the invitation to Germany by the Conference 33
Jefferson. Thomas, *Notes on the establishment of a Monetary Unit and of a Coinage for the United States* 437–443
Analysis.
Circumstances to be considered in the Unit 437
The Spanish Dollar fulfils the conditions 437–439
The Decimal System commended 437, 438
Coins to be struck 438
Objections to Mr. Morris' proposed unit of 1440ths on account of its minuteness 440
Dollars of different weights 441
Alloys of different countries stated and proportion suggested for coinage and plate 441
The ratio (proportion) between Gold and Silver, a mercantile problem. 441
States the legal proportion in England, France, and Spain 441
We should take an average ratio 441–442
15 for 1 may be eligible 442
Alloy favored for Gold and Silver coin ($\frac{1}{12}$) 442
Proposes an ordinance in accordance with the above views 443
——— Letter to Alexander Hamilton on the latter's Report on the Mint. Concurs that the unit should stand on both metals, and agrees to the proportion recommended by Hamilton. Makes suggestions against reducing the value of the Dollar 486
Johannes (Gold). Value in United States in 1776 422
Journal of Conference of 1878 1–193
Kasson. Hon. John A., Extracts from his *Report of Committee on Coinage, &c.* (1866), concerning a common standard of International values 791–794
——— Suggests a conference at Paris in 1867 793
——— The unit must, in all countries, contain an equal amount of Gold (or Silver) with fixed proportion of alloy 793
Knox. John Jay, Deputy Comptroller of the Currency, (U. S.). Extracts from Report and Correspondence 43
——— Statement of paper money 105
Kreuzer, fractional coin of Austria-Hungary 97
Kuefstein. Count Von, (Delegate of Austria-Hungary). Remarks 69
——— Accepts the reply to the United States Propositions 164
——— Declaration in accepting the Reply to the United States Propositions .. 167
Labor better off when prices are falling (Prof. Rogers) 389
Lardy. Dr. Charles Edward, (Delegate of Switzerland). Remarks 5
——— Remarks 6
——— Presents Documents concerning Monetary System of the Swiss Confederation 18
——— Presents Vote on the Monetary System of Switzerland and Statement of the Coinage (Exhibit D, Seventh Session) 162
"Latin Union": the Treaty creating the (1865), and supplementary Treaty Declarations 779–780
——— Treaty of Dec. 23, 1865.
——— Present attitude of members of, defined by Mr. Say 55
——— Silver Coinage under the (Baralis) 89
——— Policy of, defended by Mr. Feer-Herzog 116
——— Belgium in the 137
——— Second Treaty drafted in Autumn of 1878 735
——— Origin (1865). *Report to the Emperor of the French* by M. Achille Fould, Minister of Finance (1866) 781–786
The quantity and depreciation of Gold in France 781–782
The introduction of Silver Token Coins of small denominations 782–783
Silver could not be made to reappear in France in 1865 783
Influences leading to the Union 784
The Conference called; and the Treaty signed Dec. 23, 1865 785

Page.

"Latin Union"—Continued.
—— Treaty constituting the (December 23, 1865.)
Synopsis.
The contracting States 787
Coinage of Gold and Silver, weight, fineness, &c., of Coins, including the legal-tender 5-franc Silver pieces 788
Silver "Token" coinage, weight, fineness, &c 788
Legal Tender to 50 francs 788
Receivable by the Banks up to 100 francs 788
Redeemable by the Governments in Legal Tender in sums not less than 100 francs 789
Token coins 6 francs per capita 789
Treaty to remain in force till January 1, 1880, with provision for renewal. 789
—— United States invited by France to join the, (Letter of M. Berthemy, French Minister at Washington, to Hon. Wm. H. Seward, U. S. Secretary of State, January 4, 1867) 795–798
—— Response of the U. S. (Letter of Mr. Seward to M. Berthemy) 798–799
Laveleye. Emile de, Letter to R. E. Fenton concerning Monetary affairs of Belgium 228–229
Law, position of, in the doctrine of Money (Horton) 741–757
Law. See *Legislation.*
Laws, of great nations give the value to Gold. (Benton, 1834) 694
Legal ratio. See *Ratio.*
Legal Tender: Austria-Hungary, notes that are legal-tender in 97
—— Canada, Silver coins are legal-tender in, to $10 36
—— England, Silver coins are legal-tender in, to forty shillings 36
—— —— formerly part of royal prerogative to declare ..... 373, note.
—— —— silver only, to 40 shillings (56 Geo. III., c. 68, 1816) 377
—— France, coins that are, in 157
—— Germany, silver remains legal-tender in, temporarily since the new imperial coinage (1871–'3) 734
—— Great Britain, silver coin not legal-tender in, exceeding £25, except by weight (Stat. 14 Geo. III., c. 42) 332–333
—— —— coins that are legal tender in the United Kingdom 35–40
—— Hong-Kong, Mexican dollar sole legal tender at 38–39
—— Japan, the yen or trade dollar in 140
—— Scandinavian Union, fractional Silver, and amount authorized to be issued by 101
—— United States, foreign coins that have been, under United States laws .. 103
—— —— foreign Gold coins not, after 1819 (Adams) 497
—— Coinage of Silver on the French ratio recommended for England (Baring 1828) 667
—— Fractions of payment. Copper coins in United States, to the Government five per cent. (1786) 453
—— —— The *Ryder*, gold, in the Netherlands for one-third ..... 453, note.
—— —— French copper $\frac{1}{10}$ ..... 453, note.
—— —— Government paper in Portugal for one-half ..... 453, note.
Legal-Tender Notes United States. Redemption of, under law of 1875 104
Legislation: Bi-metallic, as creating a demand for Gold only up to the ratio of the mint price (Horton) 707
—— control largely the demand for the money metals (Horton) 244
—— fixing what metal shall be legal tender increases the demand and stimulates the self-interest of individuals (Horton) 704
—— Various great acts of, affecting the values of Gold and Silver about the year 1800 (Horton) 704–705
Levantine silver dollar of Austria-Hungary 98
Limitation of silver coinage in the "Latin Union" 734
Linderman. Dr. A. R., on Gold Standard in the United States 43
—— Statement of coinage in United States and estimate of stock of precious metals in 1876 and 1877 105
—— concerning the Japanese "yen" or trade dollar 140
Liverpool. Charles, Earl of, Estimate of amount of English Silver Coinage 337
Letter to the King on the coins of the realm (1805) 339–343
The Silver Coinage was diminished and the Gold coins deficient in weight in 1760 340
His suggestions concerning a recoinage as approved by King and Parliament. Gold coin to be regulated by weight as well as by tale 341
—— His Gold monometallist theory (Horton) 354
—— Quoting Sir William Petty and Mr. Locke, that the principal measure of property should be made of *one metal only* (Ingham, 1830) 571

Page.
Liverpool. Charles, Earl of—Continued.
——— His statement of the relative value of Gold and Silver from the most ancient times 655
Livingston. Walter, Coinage system proposed to Continental Congress, 1786.. 449–450
Livre tournois, pound of Tours (France) ..... 256 and note.
Louis d'or: gold coin of France, and subdivisions, recoinage under ordinance of 1785 154
——— Recoinage in France in 1785 256–266
——— Old, amount recoined under law of 1785, and amount lost by exportation or melting down (de Calonne) ..... 260 and note.
——— Premium paid for, in Paris before 1785 (de Calonne) 260
——— Benefits from the recoinage of, in 1785 (de Colonne) 264–266
——— ("lewidors") taken but at 17s. by advice of Sir Isaac Newton 319
——— Great quantities of, then came to the English Mint 319
Lowe. Rt. Hon. R., Extract from *Speech on International Coinage and Standards* (1869) 381–382
No International Coinage on the Double Standard 381–382
France disposed to accept the Single Gold Standard 381–382
Suggestions as to an international gold coin 382
Lowndes. Mr., Extract from his Report to the House of Representatives (1819) on the expediency of a change of ratio and seigniorage on silver coins 502
Magens. Magens Dorrien, (1753) English ratio of Gold too high, price of the guinea should be lowered (Desrotours) 271
——— (1804) On the scarcity of small Silver money in England ..... 328, and note.
Malta: currency in 37
Marc ..... 285, note.
Mark, the new German Gold and Silver 733–734
Market price and mint price of bullion considered (Ingham, 1830) 572
——— Gold bullion in London less than the coin value. Why? (Hamilton, 1791) 475
——— Gold coins in the Paris market in 1785 (de Calonne) ..... 259, and note.
——— Standard Gold and Silver in London from 1760 to 1829. *Table* 647–648
Market ratio of Gold and Silver in Paris October, 1785, and in London in July and August, 1785, below the legal ratio of the French recoinage (de Calonne) ..... 261, and note.
——— cannot alone serve as guide in fixing a legal ratio ..... 261, and note.
——— in Paris after 1779 (Horton) ..... 260, note
Massachusetts Bay. Province of, Act regulating the value of foreign and English coins in (23 George, II., c. 5) 417–419
Mauritius, Currency in 39
Mees. Mr. W. C., (Delegate of the Netherlands). Presents note on the Monetary legislation of the Netherlands 18
——— Declares his instructions 53
——— Deprecates the general demonetization of Silver 54
——— Remarks 92
——— Unable to attend concluding sessions of Conference 109
——— Letter to Mr. R. E. Fenton, transmitting documents relating to the Bank of the Netherlands 227
Members of the Conference of 1878. List of 195–200
Merle. W., Evidence as to the premium for Silver in England in 1810 (Bullion Report) 368
Metallic currency, amount of, does not necessarily increase in a ratio with the increase of trade (White, 1829) 625
Mexico: Dollar, weight, in demand for shipment, value in the United States. 38–39, 610
——— ——— Sole legal tender at Hong-Kong 38–39
Mines, United States, Silver and Gold. The United States Government not interested in the working of (Groesbeck) 20
Mint: Australia, at Melbourne, in Victoria, and Sydney, in New South Wales, open to the Coinage of Gold 38
——— Belgium. See *Proposition*.
——— China, at Hong-Kong, abandoned in 1869 39
——— Denmark 102
——— Denmark, fabrication at 192
——— England, amount of Gold Moneys coined at, from 1797 to 1809 (Bullion Report) 370
——— England, regulations respecting 35–36
——— ——— obliged to receive all Gold for coinage at fixed rates 35
——— ——— receives small brokerage for coining 35

Page.

Mint: England charges only actual expenses of producing token coins for the colonies. Note (Goschen) 40
——— France, directors to receive plate for coinage (1789) 294
——— ——— National and foreign specie and ingots (1791) 295
——— ——— Equal amount of grains of coined Money to be given for Bullion. 295
——— India, Calcutta and Bombay coin Gold and Silver 36–37
——— Mexico, coinage at the, from 1804 to 1810, and at various Mints up to 1825. *Table* 653
——— Norway 102
——— Norway, fabrication at 192
——— Russia, regulations and charges respecting the refining of Gold and Silver 100
——— Sweden 102
——— Sweden, fabrication at 192
——— Switzerland, has never coined Gold 191
——— United States, founded under law of 1792 103
——— ——— under the original law of 1792. Fineness of Gold and Silver at the, coinage of the (Adams) 495
——— ——— See *Hamilton.*
Mint charge, principles of levying, examined (Hamilton) 468–474
——— Removal of, equal to a premium on the export of merchandise (de Fortbonnais) 289
——— Seigniorage or Brassage desirable, under the Double Standard, to counteract the tendency to melt down one or the other metal (Baring, 1828) 670
——— ——— on coins of various nations. *Table* 630–633
——— Austria-Hungary, for coining Gold and Silver 98
——— Belgium, on Gold and Silver 137
——— Bombay, seigniorage on Gold 37
——— Calcutta, seigniorage on Gold 37
——— Denmark 102
——— England, none since 18 Car. II., c. 3 (Lord Liverpool) 341
——— ——— under law of 1816 376
——— ——— actual cost of Coinage only charged by the Royal Mint to those British Colonies having Subsidiary Coinage of their own 40
——— ——— Seigniorage on Subsidiary Coins 36
——— France, under law of 1803 155
——— ——— Cost of Coinage not reckoned in the par of exchange (de Fortbonnais) 286
——— ——— 1872, stated and commented on by Robert Morris 429
——— ——— stated (Ingham, 1830) 566
——— ——— on Gold and Silver since 1803 (Horton) ..... 687, note
——— France: Seigniorage reduced by Turgot, and the result shown. (Desrotours) ..... 273, note
——— ——— ——— in 1771 and 1785 (Desrotours) 274
——— ——— ——— under law of 1785 should be reduced to the rate of 1771 .. 274, 275
——— ——— ——— (de Fortbonnais) 284
——— ——— ——— none in France under Colbert, 1679 285
——— ——— ——— on Gold and Silver stated (Gallatin, 1829) 590
——— Germany in new Imperial Coinage 733
——— Japan (Linderman) 140
——— Norway 102
——— Russia, none 100
——— Sweden 102
——— United States, 1786 (Horton) ..... 452, note
——— ——— under law of 1786 (Ingham) 562
——— ——— none under the law of 1792 103
——— ——— under law of 1853 104
——— ——— under law of 1873 104
——— ——— under law of 1875 104
Mint-price of Bullion, Gold and Silver, at ¼ per cent. below the coin value, advocated by Alexander Hamilton (United States, 1791) 476
Mirabeau condemns Report of Coinage Committee of the French National Assembly of 1790, and proposes a coinage system 297–299
The ratio a useless question and one not to be acted upon; to be left to the chances of commerce 298
Money a measure 298
Universal money practicable 299
Silver to be the constitutional money of France 299
Gold and Copper for additional signs *as trade coin* 299
No seigniorage 299

Page.

Mirabeau, the elder (Tonneau). Observations on Second Report of Committee on Coinage. The ratio of 1785 in France was too high ..... 304, note
Mohur, Gold coin of British India 36
Moidors, Gold coin of Portugal circulated in west of England (Newton) 319
——— value in United States in 1776 422
Monetary functions of Silver as well as Gold necessary to be maintained, but to be governed by the special position of each state. See *Reply of the European Delegates, &c.*
Monetary laws can create a demand, and thus, in a measure, create values (Horton) 128
Monetary policy, study of. See *Horton.*
Monetary propositions concerning Coins, relative value of the metals, &c. (Sir James Steuart, "Principles of Political Œconomy") 719–722
Monetary unity: (German Commercial Convention, 1868) 727, 728
——— under the Roman Empire and in the 13th century (de Parieu) 810
——— must extend to subdivisionary coins (M. Broch, Conf. 1867) 818
Money: a measure (Mirabeau) 298–299
——— Influence of law on, increasing Legal Tender (Horton) 741–757
——— Partial list of modern publications on the subject of, (Horton) 737–773
——— See *Principles.*
Money-metals: The demand for the, for use as money governs chiefly their relative market rate of exchange (Horton) 244
Other influences are secondary 244
Demand for, may be controlled by legislation 244
Money-supply, diminution of, disastrous (Walker) 78
Moneys of account of different nations valued in hundredths of United States Silver Dollar (*Table*) 586–587
Mono-metallism: defended by Mr. Feer-Herzog 81
——— The theory of, examined by Mr. Horton 132
——— in strict sense advocated by only three Delegations to the Conference of 1878 205
Moore. Saml., (United States Mint). Letter to Hon. S. D. Ingham in reply to circular (see *Ingham*) giving statements of weight and fineness of Foreign Coins, Exchanges, Transportation of Coins and Bullion, ratio of Gold to Silver (1829) 603–610
Morris. Robert, Superintendent of Finance (United States); his coinage scheme in 1782.
examines the ratio in different countries and standards 428
One metal for the standard 428
Gold portable, but paper still more so 428
United States Money standard should be affixed to Silver 429
French coin not exported because of the heavy mint charge 429–430
Price of coining should be defrayed by the coinage 430
A very small money-unit desirable, with the Decimal system 430
The 1440th part of a Dollar recommended as a Unit 430
Coins suggested 431
——— Proposed Ordinance for the Valuation of Foreign Coins by weight 433, 434
Natal. Currency in 38
National Bank Notes. Amount of, in United States, November 1, 1877 105
National Banking System outlined by Mr. Crawford in 1820. See *Crawford.*
Netherlands: Address of the Society of the, &c., to the King concerning the depreciation of Silver 185–189
——— cannot abandon the Single Gold Standard (Mees) 53
——— divided in opinion at the Conference of 1878 (see Netherlands, Society of the, Vrolik & Mees) 208
——— Gold used as the invariable term of comparison in Holland in the eighteenth century (de Fortbonnais) 282
——— Bank of. See *Bank of the Netherlands.*
——— Coins, Silver and Gold; amount of metallic stock: the unit is the gold contained in the piece of 10 florins (Mees) 41
——— coins, fineness, weight, and value in United States (Moore, 1829) 607
——— ratio (Desrotours) 272
Newfoundland, single Gold Standard, and Coins in use 37
Newton. Sir Isaac, Master of the English Mint; his reports concerning the Gold and Siver Coins (1717) 317–321
The Guinea worth only about 20*s.* 8*d.* 317
Gives the ratio in Spain, Portugal, and France 317
Holland, Italy, Germany, Poland, Denmark, Sweden, China, and Japan 318
Gives the ratio in all Europe as 14⅓ to 15 318

Page.

Newton. Sir Isaac—Continued.
Advises taking 10 or 12*d.* from the Guinea 319
6*d.* taken off would diminish the export of Silver Coin 319
The scarcity of Silver will cause Gold to fall of itself 320
Reports Gold and Silver Coinage at the Mint 1701–'17 320
——— cited by Desrotours 271
New Zealand, currency in 38
"Normal price of Silver," remarks of Mr. Walker upon the, as understood by Mr. Goschen 77
Norway: Coins, Gold and Silver, weight, fineness, &c. 101
Noyes, Edward F. (United States minister to France). Letter to Hon. Reuben E. Fenton transmitting document concerning the Bank of France 220
Osgood. Samuel, Coinage system proposed to continental Congress, 1786 .... 449, 450
Overvaluing one of the Money metals; effect considered (Hamilton) 463
Ovid. In praise of Gold Money. (Quoted by de Parieu; Conference of 1867). 875
Paper Currency, United States, funding of. See *Crawford.*
Paper Money. Its nature and requisites examined. See *Crawford.*
——— Belgium, issue of, amount, &c., and coin reserves 228, 229
——— England, issued by the Bank of England 226
——— ——— its replacement by gold in England raised the rating of gold (Hoffmann, 1832) 380
——— France, issued only by the Bank of France 220
——— Amount of, in 1877–'78 221
——— Germany, amount of (law of 1875) 224
——— United States, amount of November 1, 1877 105
Par guaranteed by French free coinage of both Gold and Silver as full Legal-Tender; great events which tended to disturb it (Horton) 716
Par of exchange between Europe and Asia destroyed by German demonetization and the closing of the mints of the Latin Union to Silver 205
——— between Gold and Silver countries, how established and maintained (Walker) 77
——— between Great Britain and the United States $4.44 (Adams) 490–501
——— The calculations of, erroneous, and the pound sterling at the time only a money of account 491
——— The medium par stated 492
——— Note upon the par of $4.44 (Horton) 493, 494
——— The true guide for ascertaining (*Tables*) 584, 585, 586, 587
——— United States, on London, and premium at which gold is transported (Moore, 1829) 608
Par, nominal, between the United States and England is $2\frac{72\frac{1}{2}}{100}$ per cent. less than the *real* par in Gold and 4 per cent. less than the true par in Silver (White, 1829) 621–622
Parieu. E. de, Vice-President International Monetary Conference of 1867; his report of the results of the conference 871–877
"Paris pound." ..... 258, note.
Parliament. Debate in, on the scarcity of Silver and on lowering the value of the Gold Coins 315–322
——— resolves that the standard of the Gold and Silver Coins of the kingdom shall not be altered (1718) 321
Piece of Eight. See *Dollar.*
Pirmez. Mr. Eudore, Delegate of Belgium, declares that his country must reject the proposition for the double standard 27
——— Address to the conference 118–125
——— A bi-metallic union impracticable; and even if brought about it would not produce a ratio other than that governed by economic laws 118–125
——— offers statement of Gold and Silver Coins in Belgium (Exhibit B, seventh session) 162
——— transmits to Mr. Fenton statement respecting the National Bank of Belgium 229
Pistole, French, value in the United States in 1776 422
——— Spanish, value in the United States in 1776 422
Pix. See *Remedy of weight and alloy.*
Platina suggested for international Coinage by M. Jacobi (Conf. of 1867) 854, 855
Population, increase of, requires more gold (Giffen) 394
Portugal: coins; fineness and weight; standard variable; value of the "Half Johannes" in the United States (Moore, 1829) 607
Pound sterling, British, value of, in United States coin (Adams, 1821) 500, 501
Precious metals, subject to variations in value from permanent causes (Crawford) 524, 525

Page.
Premium on Gold in France in 1830, and Silver the chief medium of circulation (White) ... 657
——— Philadelphia, none in, before 1821 (Moore, 1829) ... 605
——— Philadelphia from 1821 to 1829 (*Table*) ... 611–613
——— measured in Silver first in the United States in 1821 (Moore) ... 678
——— in the United States owing to British demand (White, 1830) ... 659
——— on Gold and Silver, New York, coins and bullion in, from 1817 to 1829. *Table* ... 617
——— paid for bullion at the French mints—*Surachats* (Desrotours) ... 272
Price of a money-metal, raising of the, for Coinage, raises the price of the metal as merchandise (de Fortbonnais) ... 289
Price of Gold in London from 1800 to 1829. *Table* ... 611–613
Price of Silver not materially affected by the great Gold yield between 1852 and 1856 (Society of the Netherlands, &c.) ... 186
——— in London from 1815 to 1829. *Table* ... 611–613
——— (See *Diagram of Quotations of Silver.*)
Price of the two coined metals cannot be fixed by invariable rule; one only can be so fixed (de Fortbonnais) ... 281
Prices, no present rise of, in countries using a Silver Standard, as India (Professor Rogers, 1879) ... 388–389
——— Government of India, resolution ... 411
——— England, table of variations (Jevons) ... 379
——— Great Britain, 1859, 1869, 1873, 1876, 1878. *Tables* ... 404
——— Great Britain, aggregate of articles imported and produced in 1859, 1869, 1873, 1876, and 1878. *Table* ... 405
——— Great Britain, wholesale, of commodities. *Table*, 1845–1877 ... 403
——— Great Britain and New York, of wholesale commodities, 1873–'79. *Table* ... 402
——— See *Fall of Prices.*
Principles applicable to money, the distribution of the metals, and the selection of one or both as a standard. (C. P. White, Committee Report, 1832) ... 674
Production of Gold. (See *Gold.*)
Production of Gold and Silver since the discovery of America (White, 1829) ... 625–628
——— Causes little or no effect on the relative values of the two metals ... 625–628
——— Relative amounts down to 1800 (Moore, 1829) ... 608–609
——— from 1790 to 1802 ... 609, note.
——— Annual, from 1790 to 1802 in the Old and New Worlds (Brogniart). *Table* 652
——— of the precious metals from 1852 to 1856, and from 1871 to 1875 (Society of the Netherlands, &c.) ... 186
Prohibition of the Coinage of Silver. See *England* and *Silver.*
Proportion, total of Silver to Gold (Bullion Report) ... 370
Proportional value of Gold will increase by any commercial nation preferring it as Currency (Moore, 1829) ... 609
——— The demand operating on a supply not now well sustained ... 609
——— between Gold and Silver. (See *Ratio.*)
Proposition of the Belgian Mint, submitted September 3, 1878, to Mr. Fenton, President of the American Commission to the Monetary Congress of 1878 ... 232–234
——— The United States should regulate the world's markets of fine Silver. 232
——— and authorize the Coinage of Silver Dollars at the Brussels Mint ... 232
——— Details of the plan ... 233–234
Propositions submitted by the United States to the Conference touching the unrestricted Coinage of Silver and the use of both Gold and Silver as unlimited Legal-Tender Money (Groesbeck) ... 22
——— Position of France with regard to the same, defined by Mr. Leon Say. 56, 57
——— Favored by the Italian Delegate, Count Rusconi ... 61–62, 125
——— The United States do not expect the whole world, including China and India, to adopt the Double Standard (Horton) Universality not essential ... 128
Public debt of France reduced during the great revolution to one-third (Crawford, 1820). In Holland that portion which had been abolished by the French has been restored (Crawford, 1820) ... 530
Ratio. Countries producing Gold and Silver govern the proportional (de Calonne) ... 258
——— Effect of the legal, upon the market considered (Horton) ... 243–244
——— The State to fix the (Horton) ... 239
——— To be left to the chances of commerce (Mirabeau) ... 298
——— Unity of; when the world might have attained it (Horton) ... 245

Page.

Ratio. International, of 15½ to 1 recommended for adoption by the Society of the Netherlands 185
——— Impossible (Feer-Herzog) 90
——— Useless to discuss at Conference of 1878 under existing complications.. 213
——— But favored in propositions submitted by the United States (see *Reply of European Delegates*) 212
——— Common, between Gold and Silver impossible. See *Reply of the European Delegates.*
——— Gold Eagle and Pound Sterling, various ratios and values of, in dollars thereunder. *Table* 601
——— Gold to Silver, 1760–1829. *Table* 583
——— of Standard Gold to Standard Silver, London, 1760 to 1829. *Table* 647–648
——— Market, of Gold to Silver at Hamburg 1700 to 1832 (Soetbeer). *Table.* 708–709
——— ancient times, ratios in (Desrotours) 270
——— England, during the reigns of Henry VIII and Edward VI (Ingham).. 560
——— ——— Ratios from 1066–1821. *Table* 619
——— ——— Ratios in Coinage (Ingham, 1830) 564–566
——— ——— See *England: Ratio.*
——— Europe, in 1717, was 14⅘ to 15 to 1 (Newton) 318
——— in principal countries, given by Newton 317–318
——— France, the legal, in 1726 (de Calonne) 261
——— ——— in 1726 (Steuart) 326
——— ——— History of the ratio of 15½ 249–306
——— ——— 15½ adopted in 1785 (Say) 136
——— ——— 15½ established by ordinance of 1785 154
——— ——— 15½ well chosen in 1785 (de Calonne) 260–263
——— ——— of 1785 (15½) too high (Mirabeau the elder) ..... 304, note.
——— ——— 15 would have been the true, in 1303, instead of 15½ (Gaudin).. 303–304
——— ——— too low, causing premium on Gold; 15.58 suggested (Gallatin 1829).
——— ——— should be adopted by the United States (Ingham, 1830) 576–580
——— ——— See *France.*
——— Germany, 15⅘ during transition from the single Silver to the single Gold Standard (Horton) 239
——— ——— of weight under new coinage 15½ 733
——— Holland in 1789, and in London, stated by Alex. Hamilton 465
——— ——— See *Netherlands: Ratio.*
——— Japan, the present (Linderman) 140
——— Russia and Spain (de Parieu, Conf. 1867) 836
——— Spain, raised in, in 1779 258
——— See *Spain: Ratio.*
——— United States; 15 to 1 favored in the United States by Thos. Jefferson. 442
——— ——— under law of 1786; under law of 1792 103
——— ——— under the law of 1834 104
——— ——— under the law of 1837 104
——— ——— Mr. Crawford (Secretary of the Treasury) recommended 15.75 in 1820 519
——— ——— See *Hamilton.*
——— ——— See *Ingham.*
——— ——— See *United States: Ratio.*
——— various countries. (Report of Committee of French National Assembly in 1790; de Fortbonnais.) *Table* 220
——— various countries up to 1779 (de Calonne) 258
——— various, in 1782; stated by Mr. Morris, United States Superintendent of Finance 428
——— ——— stated by Thomas Jefferson 441
——— See *Market Price.*
Ratios: Four different aspects considered (de Fortbonnais) 287
——— various European, in 1859–'60. (Mees & Feer-Herzog, Conference 1867). 836
——— See *Gallatin.*
Raynal. Abbé, his estimate of the amount of Gold and Silver furnished by the American mines. (White, 1829) 627
Recoinage of 1785, in France 254–267
——— of French Gold Louis in 1785 256–267
Reichsbank, Germany. (See *German Imperial Bank.*)
Relation between price of Gold and Silver, how found. Exhibit A (first session) 7
——— from 1526 to 1575 8
——— from 1604 to 1685 8
——— from 1687 to 1800 8
——— from 1801 to 1850 8
——— from 1850 to 1877 9

Page.
Relative values of Gold and Silver. (See *Ingham.*)
——— from the most ancient times to 1717 (Lord Liverpool) 655
——— little affected by the variations in the production of the mines (White, 1829). (See *John White*) 627–628
Remedy in coins of various nations. *Table.* 630–633
Remedy of weight, none in coins of the United States (Adams) 498
——— ——— and alloy, effect of, in the coins of France and Spain (Hamilton). 466
——— Manner of its application to English Coins from the Mint (Hamilton).. 483
——— Similar regulation recommended for the United States (Hamilton).... 484
Reply of the European Delegates to the propositions of the United States, submitted to the Conference of 1878 151
——— Translation of same into English 152
Reply of the European Delegates to the propositions submitted by the United States Delegation to the Conference of 1878, and official English translation 162–163
Report of the Committee on Coinage to the National Assembly of France upon the ratio, and in favor of gratuitous Coinage (1790) 268–294
——— Committee on Coinage of the French Assembly criticised and condemned by Mirabeau (see *Mirabeau*) 297–299
——— Committee on the Currency on the expediency of increasing the relative value of the Gold to be coined at the Mint of the United States (1821) 554–557
United States Gold Coins are rated too low 554
Hence a drain of Gold 554
Favors a Gold currency 555
Deplores the ratio of 15 to 1 as ridding us of Gold 556
Recommends an advance in the value of Gold of four per cent 556
——— William H. Crawford (Secretary of the Treasury), 1820 502–541
——— S. D. Ingham, Secretary of the Treasury of United States, on the Relative Value of Gold and Silver (1830). See *Ingham.*
——— United States Commission (Conference of 1878) 201–216
Political complications interfering with the attainment of the objects of the Conference 204
Demonetization of Silver, according to the sentiment of the Conference, should not be carried further 204
England's Delegates admitted that disastrous consequences would follow universal Gold Mono-metallism 205
Effects of demonetization considered 205, 206
The Latin Union divided in opinion 206
Switzerland and Belgium hostile to Bi-metallism 206
France in an expectant attitude, but favorable to the system of the Double Standard 206, 207
Italy in favor of the Bi-metallic System 207
Greece in accord with the views of France 207
Austria-Hungary attached to the Double Standard 207
Russia reserves her decision 207
Pressure of debts should not be increased by diminishing amount of the precious metals in circulation 208
General resumption of specie payment favored by the retention of Silver 208
The Delegates of Holland divided 208
The Delegates of Sweden and Norway instructed not to compromise the Mono-metallic position of those States 209
The United States supposed to be interested as a producer of Silver. This idea combated 209
Reasons which prevented action by the Conference at the present time. 210, 211
Dangers of the policy of expectancy 211
Immediate action urged by the United States Delegates in favor of the restoration of Silver 211, 212
England adheres to the Single Gold Standard, while claiming to have done more for Silver than any other Power 212, 213
Useless to discuss a ratio in the Conference 213
The two Propositions submitted by the United States Delegates 213
The third Proposition held in reserve, but not presented 214
The Reply of the Majority of the European Delegates 214
The Rejoinder of the United States Delegates 215
Conclusion 215–216
——— upon Weights and Measures. See *John Quincy Adams.*
Reports made by Sir Isaac Newton concerning the state of the Gold and Silver Coins of England see *Sir Isaac Newton* 317–321

Page.
Response of the United States Delegation (Conference of 1878) to the Reply of the European Delegates to the United States Propositions 167
——— French translation of 168
Restoration of Silver. See *Report of United States Commission, Conference of 1878; Fenton, Groesbeck, Walker, Horton, Rusconi, Hengelmüller.*
Restrictions against exportation of Gold and Silver, effects of (Ingham, 1830). 567
Resumption of specie payments in Europe, amount of specie required, and effect of its withdrawal upon the other nations (Crawford, 1820) 526
——— of payments in Gold, amount of metal needed for, not considerable (Broch) 62, 63
Retenue. See *Mint Charge.*
Rise in the value of Gold. See *Giffen, Horton, Rogers.*
Rise of the Silver price of Gold. See *Horton* ..... 701 *et seq.*
Rogers. Prof. J. Thorold, on the "Causes of Commercial Depression" (1879). 387–389
——— The rise in the value of Gold, and German demonetization of Silver 388
Rouble, the Silver, unit of Coinage in Russia, weight, fineness, &c 99
Ruau. Mr. Jean Louis André, (Delegate of France), submits Diagram (Exhibit B, first session) 6
——— presents: 1st, The Declaration of the King, 30th October, 1785, relating to the ratio between Gold and Silver; 2d, The "Law of 7 Germinal, year xi.," on the Coinage (Exhibit A, sixth session); also, Synoptical Table of French Coins (Exhibit B, sixth session) 145
Ruding. *Annals of the Coinage.* State of the English Coinage in 1760 337–338
Ruggles. Samuel B., (United States Delegate, Conference 1867).
——— Double Standard practically abolished in the United States by the act of 1853, relating to Subsidiary Coinage; regards the Double Standard as a fallacy and an impossibility 825
——— Argument in favor of the 25-franc piece for an International Coin (Conference 1867, appendix, sixth session) 861–865
——— The French Coinage not metrical 861
——— The United States Coins not decimal in weight 862
——— The Gold Coinage of the United States, Great Britain, and France 863, 864
——— Recoinage necessary by Great Britain and the United States for the sake of International Unification 865
——— France asked to coin the 25-franc piece as a contribution to the great work of unification 865
Rupee, East Indian, sole Legal Tender in Ceylon, and unit of value in Mauritius. 39
——— the silver, standard of value in British India, and sole unlimited Legal Tender, its weight, subdivisions, &c 36
——— sole Legal Tender in Ceylon 39
Rusconi. Count Charles, Delegate of Italy. Remarks 5, 27
——— desires the presence of Germany at the Conference 32
——— urges the Conference to invite Germany to participate 33
——— favors the proposition of the United States 61
——— and in further remarks 92–93
——— Remarks favoring the proposition of the United States 125–126
——— on behalf of Mr. Vrolik, offers copy of address on the Monetary question presented to the King of the Netherlands by the Netherlands Society for the Progress of Industry (Exhibit C, seventh session) 162
——— refuses to accept the reply to the United States propositions, believing that international legislation could establish the relation of value between Gold and Silver 164–165
Russia: The relation between the value of the Bill of Credit and Silver, and the depreciation of Silver in 1876 (Thoerner) 44
——— Coins, Gold and Silver 99–100
Saint Helena, currency in 40
Sale of a shipment of Silver from Baltimore to Liverpool, weights, proceeds, &c 620
Say. Mr. Léon, (Delegate of France), chosen President of the Conference, and remarks of 2
——— Remarks at opening of Conference 2, 3
——— Remarks suggesting submission of documents by the Delegates 4, 5
——— Remarks 5, 23
——— Inquiries concerning the policy of the United States in restoring the Double Standard 25
——— Remarks 30, 32, 48
——— Statement of the attitude of France and the Latin Union concerning Silver and the Propositions submitted by the United States at the Conference of 1878 55–57

Page.
Say. Mr. Léon—Continued.
——— presents letter from the German Government declining invitation of the Conference to its sittings 70
——— Remarks 89, 94, 95, 96
——— Remarks concerning the adoption of the ratio of 15½ in France 136
——— suggests a short adjournment for the preparation of the answer to be made to the United States propositions 150
——— presents enumeration of the Gold 20 and 10 franc pieces and of the Silver 5-franc pieces, found on the 14th of August, 1878, in the 19,511 offices of account of the finance department of France (Exhibit A, seventh session) 161, 162
——— reads the memorandum of the proposed Reply of the European Delegates to the Question proposed by the American Delegation 162
——— Concluding remarks 169
Scandinavian Union: Coins, Coinage, and Credit Circulation 192, 193
——— Monetary system under treaty 101
——— Treaty creating the (1872) 780
Secombe. Sir Thomas L., (Delegate of Great Britain). Remarks; Establishment of a fixed ratio impracticable 126, 127
Seigniorage. See *Mint charge.*
Sherman. John, Secretary of Treasury of United States, letter to Mr. William S. Groesbeck: Was formerly in favor of single Gold Standard, but the danger of dropping one of the precious metals outweighs all theoretic objections to the By-metallic System; an international agreement greatly to be desired 139
——— Second letter to Mr. William S. Grosbeck, enclosing statement of Coin, &c., in the United States Treasury 139
Shilling, British Silver, and subdivisions 36
Shipments of Coin and Bullion to England and France, expenses on. *Table* 644–645
Silver: annual production of, easily absorbed by the world (Groesbeck) 114
——— Change in the value of. See *India.*
——— chief circulating, medium in France in 1830 (White) 657
——— circulating in France, even when largely exported (de Parieu, Conf. 1867) 830
——— Degradation of, protested against by the United States at the Conference of 1878 (Walker) 78
——— England's chief "sinews of war" against Napoleon, 1797, 1810 (Horton) 358
——— Fall of (Broch) 28
——— falling in price throughout the world. (Bullion Report, 1810) 366
——— A "fictitious value" given to it in India by Free Coinage (Bengal Chamber of Commerce) 410
——— given a high relative value by France (Desrotours) 270
——— the money of domestic trade 270
——— Price of, in relation to Gold, lowest in July, 1876 (Exhibit A, first session) 9
——— Price of. See also *Price.*
——— Scarcity of, in England, debated in Parliament, 1717 and 1718 315–322
——— ——— Reasons therefor, and chiefly, the vast exports of, to the East (Lord Stanhope) 322
——— Weight and value of, in use in 1810, as compared with Gold (Horton) .. 352
——— See *Demonetization of.*
——— See *Diagram showing Quotations of.*
——— See *Relation between Price of Gold and.*
——— See *Silver Coinage* and *Coinage.*
——— See *Silver Coins.*
——— See *Stock of.*
Silver coinage: England, only "token" money, of what it consists 36
——— ——— England, prohibited in, stat. 38 George III., c. 59 (June 21, 1798). 345–347
——— ——— Latin Union, limited in the. See *Limitation.*
——— ——— Latin Union, suspended in the (1877–'78) 734, 735
——— ——— United States, limitation of, necessary in the present state of the question (Horton) ..... 241, note.
Silver Coin, amount of, in Belgium 229
——— ——— See *England.*
Silver Coins, with weight of pure Silver in each. *Table* 584–585
——— ——— of France (law of 1803) 155
——— ——— The new, of Germany, Legal Tender up to 100 marks 224

Page.
Silver Coins of Great Britain, coinage of, weight, &c., under law of 1816, 56 George III., c. 68 ..... 373, 378
Silver dollar (412½ grains), Legal Tender in United States under the law of 1878 104
——— legislation, German, against. December 4, 1871, July 9, 1873. Establishing the unit of the "Mark," and the "Imperial Gold Standard," with token Silver Coinage. Old Silver remains Legal Tender .. 733, 734
——— ——— Holland, coinage, suspended (1875) 735
——— ——— "Latin Union," limitation of Silver five-franc coinage in 1874–'75–'76.
——— ——— Suspension of coinage of five-franc piece (except as to Italy) in 1877 734
——— ——— Continued provisional suspension of coinage under new Treaty of 1878 735
——— Production. See *Gold and Silver: Production.*
Silver standard: Austria-Hungary 97
——— Single standard for the United States advocated (John White, 1829–30) 629–661
——— Stock in Germany (Soetbeer, 1878) 729–31
Silver-Tokens, Russia 99
——— issued by the Bank of Ireland (1810) (Bullion Report) 370
Silver Unit of valuation was general in the beginning of the 19th century, Gold was rated by its price in Silver (Horton) 352
Single Gold Standard: approved by Mr. Broch (Delegate of the Netherlands) 29
——— not adapted to the Dutch Colonies (Mees) 53
——— defended by Mr. Feer-Herzog 83
——— German Commercial Convention, 1868.
——— favored. See *International Monetary Conference* 1867.
——— in Great Britain 35
——— established in England *de facto* in 1798 (Horton) 86
——— in England has increased the burden of debts (Baring, 1828) 668
——— West Indies, English Colonies, established in 39–40
——— in Scandinavian kingdoms (Norway, Sweden, and Denmark) 101
——— in Europe itself, an Utopia (Horton) 134
——— the universal adoption of a disaster (Goschen) 166
Single Silver standard: British Colonies that have a 38
——— in the Netherlands in 1847 185
——— of Locke and the elder mono-metallists (Horton) 355–356
——— advocated for the United States (Ingham, 1830) ..... 577 *et seq.*
——— advocated for the United States (C. P. White, Report of Committee 1832) 675
Single standard of the same metal a serious inconvenience as excluding one of the two precious metals; both should be retained (Mees, Conference 1867) 822
Soetbeer, Prof. Adolf. *Edelmetall-Production*, extract in translation 249
——— rejecting the London tables of ratios from 1760 to 1829 as unfit for use and deceptive (quoted by Mr. Horton) 649
——— Precious metals average annual product of the world, 1761–1830. *Table* 702
——— Market rate of Gold at Hamburg, yearly averages 1700 to 1832. *Table* 703–709
——— Statement of German Gold and Silver Coinage, the sale of Silver in Germany, and the stock on hand (1878) 729–731
Sovereign, British Gold, weight, fineness, coinage, &c. Legal Tender 35
———, weighed and assayed at United States Mint, 1829 603
Sovereign, Half, See *Half Sovereign.*
Spain: Coins, fineness and weight. Fineness variable. See *Doubloon.*
——— Value of coins in the United States. Moore, 1829. See *Dollar* 607
——— Comparative values of English, French, Spanish, and United States. *Table* 582–583
——— Ratio, changes in ratio stated (Desrotours) 276
Specie: price of, at New York in 1813, 1814, 1815, and 1816. Statement 552–553
——— monthly at New York, 1825 to 1829. *Table* 597–598
——— in New York and Baltimore 1814 to 1817. *Table* 646
——— Premium or discount on, at New York, 1825 to 1829, on the supposed ratio of 15.6069. *Table* 599–600
Speculations in exporting Gold from France after 1779 (de Calonne) 258–259
Standard. See *Alternative Standard.*
Standard Silver, fineness of 7
——— Price in London, average, 1823 to 1828 (Moore, 1829) 605–606
Standard of Elizabeth. Degraded by overvaluing Gold in the 18th century (Steuart) 324–325

Page.
Standard of Elizabeth (Horton) 353
——— in Silver (Horton) ..... 374, note.
Steuart. Sir James, Extracts from his writings illustrating the Monetary Situation of England, 1759–1773 323–327
The English ratio too high in 1759, but assimilating to the market price in 1773 by the operations of trade ..... 323 and note.
What the proportion should be 324
The overvaluing of Gold has degraded the standard of Elizabeth 324–325
Method of restoring the standard of Elizabeth and of adopting the ratio of 14½ 325
Dissertation on the principles of Money applied to the German coin 326–327
——— Monetary Propositions (from his "Principles of Political Economy") .. 719–722
——— Advocates attaching the standard to one of the species 720
Stock of Gold and Silver in the World stated by Mr. Fenton 148
——— metallic of the Netherlands 41
——— of Coin and Bullion in the United States in 1876 and 1877 105
——— of Silver in circulation in the World stated by Mr. Fenton 148
——— in France, present, stated by Mr. Say 55
——— in Germany (Feer-Herzog) 58–60
——— Germany, estimated by Mr. Groesbeck 113
Straits Settlements, Legal Tender in, &c 39
Supply, annual, of Gold and Silver stated, quoting Humboldt (Gallatin, 1829) 596
——— See *Gold.*
"Surachat" (French)—premium paid for bullion ..... 272, note.
——— an onerous and unjust device (Desrotours) 277
——— evil effects of Surachats (de Fortbonnais) 290
Suspension, Silver Coinage in the "Latin Union" (1877–8) 734–735
——— of specie payments in Philadelphia, 1814–1817, Gold and Silver equally appreciated (Moore, 1829) 606
Sweden. Coinage and Standards in (Wallenberg, Conference 1867) 826–827
——— Coins, Gold and Silver, weight, fineness, &c 101
Sweden and Norway favor the mono-metallic system at the Conference of 1878. See *Waern and Broch* 209
Swiss Confederation Monetary legislation and fabrication of Money 190–191
——— an advocate of Gold mono-metallism 206
——— See *Feer-Herzog and Lardy.*
Taylor. Bayard, (United States minister to Germany), Letter to Hon. R. E. Fenton, transmitting report concerning the German Reichsbank 223
Ten-florin, Gold Coin of the Netherlands 41
Ten franc Gold pieces. See *Gold Coins.*
Thalers, German Silver, still legal tender (unlimited) until called in 224
Thoerner. Mr. T. de, (Delegate of Russia). Declaration 31
——— Declaration, in accepting the Reply to the United States Propositions. Russia opposed to the Double Standard.
Tindal, Note on the lowering of the value of Gold in England 321
Token-coinage: England, charge on 734
——— France, charge on 737
——— Germany, charge on 737
——— Latin Union. Weight, fineness, tolerance, &c. Receivable by the banks up to 100 francs 788
——— ——— Redeemable by the Governments in Legal Tender 789
——— ——— Amount per capita, 6 francs 789
Token-coins: British 36
——— France, fineness of, in 782–783
——— Russian 99
——— Scandinavian 102
——— United States under the law of 1853 104
Token-currency of England condemned in principle (Gallatin, 1829) 596
Tokens: charge on the coinage of, in Germany, France, and England 734
——— Belgium (Nickel and copper) 137
——— Silver, in Scandinavian Kingdoms 193
Tolerance in Coinage: Austria-Hungary 97, 98
——— France for Silver and Gold 155
——— ——— Copper coins 156
——— ——— table of 157
——— Latin Union 788
——— Russia 99
——— Scandinavian Kingdoms 101

Page.

Trade. balance of, See *Balance of Trade.*
Trade Dollar: Coined in United States. Weight, fineness, &c. No paying power in United States since the law of 1876 104
——— Amount coined in United States from 1873 to 1877 105
Traffic in exchange fostered by departing too far from the ratios of other nations (de Fortbonnais) 280
Transporting Gold and Silver coins from the United States, expense of (Moore, 1829) 608
——— from the United States, expense of (White, 1829) 623
Transvaal, Currency in 38
Treasury notes, United States, concerning the proposed emission of (Crawford, 1820) 521
Treaties, monetary, for interchangeable currency, list of 777–780
Twenty-franc Gold pieces of France (under law of 1803) 155
——— See *Gold Coins.*
Twenty-five-franc piece advocated for international coinage 383
——— proposed for international coinage (Lowe) 382
——— Association of Chambers of Commerce of United Kingdom 383–384
Unification, International Monetary, recommended by Committee on Coinage of the Congress of the United States in 1866 791–794
——— between Great Britain and the United States, proposed by the United States in 1856 and a commissioner appointed 792
——— urged by the United States Secretary of the Treasury (Chase) in 1862. 792
——— on the Decimal and Metric system, advocated by the International Congress of Berlin 793
——— negotiations towards, with foreign governments provided for by resolution of the United States House of Representatives in 1866 794
——— the object of the Conference of 1867 (Marquis de Moustier) 807
——— The question a practical one as submitted (de Parieu) 810
Uniformity of value given to Gold and Silver by consent of States (Crawford, 1820) 528
——— Effect if certain countries should cease to employ them as the standard of value 528
Unit, the, should not be attached exclusively to either metal, but should rest on both (Alexander Hamilton, United States, 1791) 461
Unit, money, in United States. See *Morris* and *Jefferson.*
United Kingdom, Currency systems of the 35–40
United States. Bank of, See *Bank of the United States.*
——— capital, 1814–1817 548
——— its condition in 1819. See *Crawford.*
United States Bank, capital in the, in 1817, and condition of United States Bank (Crawford) ..... 503 *et seq.*
——— in several States, 1813–1819 551
United States: Banks, condition in 1819 549
——— Bi-metallism of the, owing to small stock of specie and ratio conflicting with the French, has not aided in maintaining the steadiness in the relative value of the precious metals (Horton) 716
——— Board of Treasury urge the establishment of a Mint, and the coining of Copper to drive out Foreign base copper (1786) 451
——— Cent, highest copper piece (1786) 450
——— Coinage, the Resolutions on, in the Continental Congress, July 6, 1785; the Dollar to be the unit 449
——— ——— The Decimal System 449
——— ——— Resolutions on (Continental Congress, 1786), fixing the Standard of alloy, Unit, the Dollar and weight thereof, Decimal Coinage of Gold and Silver 450–451
——— ——— 1793–1877 105
——— ——— Gold, since 1792 863–864
——— ——— amount of, in United States, England, and France, since the discovery of California 819
——— ——— Gold and Silver (Ruggles, Conf., 1867) 825–826
——— ——— Silver, Limitation necessary. (Horton) ..... 241, note.
——— ——— Silver. Unrestricted, favored. See *Propositions submitted by the United States.*
——— ——— executed at the Mints of the United States during fiscal year ending June 30, 1878 141
——— ——— Scheme of Robert Morris. See *Morris.*
——— ——— systems proposed. See *Jefferson, Livingston, Morris, Osgood, Hamilton.*

Page.

United States Coins, comparative values of English, French, Spanish, and. *Table*. 582, 583
——— ——— Copper, receivable by the United States, for five dollars in every hundred, (1786) 453
——— ——— Gold, Draft of Bill to raise value of Gold in (Memorial New York Banks, 1834) 682
——— ——— Gold and Silver, weight, fineness, &c. 103–104
——— ——— at par with each other from 1792 to 1821. (Samuel Moore, Director United States Mint, 1833) 678
——— ——— Foreign Gold Coins not legal tender after 1819 (Adams) 497
——— Currency, Continental (Bills of credit), issued in 1775 418, 419
——— ——— Rated in Gold and Silver Coins. *Table* 422
——— Currency of Gold advocated by a Committee on the Currency of the House of Representatives in 1821. See *Report* 555
——— Custom-duties receivable only in Gold and Silver Coin. Act of Congress, 1879. Fixing the value of foreign coins (Adams) 492
——— Decimal Monetary System. See *Decimal System.*
——— Deficient currency, complaints of, in the West and South, and reasons for the deficiency. (Crawford, 1820) 540
——— Dime, Silver, weight, &c. (1786) 450
——— ——— Lowest Silver Coin (1786) 450
——— Dollar, highest Silver Coin (1786) 450
——— Double Dime, Silver, weight, &c. (1786) 450
——— Eagle, Gold, weight, &c. (1786) 450
——— Foreign coins of Gold and Silver, at what values to be taken, in 1776. Table. (Report) 422
——— Foreign Coins (guineas, Sovereigns, and Five-franc pieces), their market values in the United States. (White, 1829) 621
——— Gold Coins in demand for the London market at a premium since Bank of England Resumption in 1821. (White, 1829) 624
——— Gold region of the; amount of annual yield from 1824 to 1835 inclusive. *Table* 689
——— Grand Committee, Report of, on the Money Unit. (Continental Congress, 1785.) Recommended ratio 15 to 1, or 14¼ 445
Opposes Mr. Morris' small unit 446
Favors the Dollar Unit and the Decimal System 446
And a Mint-charge of 2 to 2½ per cent. 447
Base half-pence imported from England 447
Proposed Coins of Gold, Silver, and Copper 447
——— Half-cent, Copper. (1786.) 450
——— Half-Dollar, Silver, weight, &c. (1786) 450
——— Half-Eagle, Gold, weight, &c. (1786) 451
——— Memorial of New York Banks that foreign Silver Coins (Dollars and Five-franc pieces) be made legal tender. (1834) 679–680
——— ——— Draft of Bill for that purpose. (*id.*) 682
——— Metallic Currency of the; amount in 1820 (Crawford) 504
——— Mill, lowest money of account. (1786) 450
——— Mint, establishment of, approved by Congress (1782) 432
——— ——— established by Ordinance, October 16, 1786 452–453
——— Mint-price of Gold and Silver (1786) 451
——— Monetary Legislation, fiduciary, circulation and coinage (Horton) 103–105
——— Monetary Unit recommended by Robt. Morris in 1782 430
——— Money Unit (1786) 450
——— Early Paper Money in the. See *Crawford* (1820).
——— Policy in view of European Demonetization of Silver suggested by Mr. Horton 756–757
——— Position at the Conference of 1878, stated by Mr. Fenton 3–4
——— Ratio according to Mr. Morris's proposed Ordinance for valuation of Foreign Coins in 1782 was 14.56 (Horton). Note 434
——— ——— too low in 1821. Four per cent. advance in Gold recommended. (Report of Congressional Committee) 554–557
——— ——— The first in the Continental Congress 422
——— ——— recommended by Mr. Crawford in 1820. See *Crawford.*
——— ——— recommended for the (1829). See *Gallatin; Ingham.*
——— Ratio of 1 to 15 proposed by Alexander Hamilton (1791) 458
——— ——— Justified by the facts of the time (Horton). 460, note.
——— Ratio of 15½ favored in 1834 by "nearly all who seemed best calculated, from their pursuits," to understand the subject (Benton) 695
——— ——— Including the 18 banks of the city of New York 695
——— Ratio of 16, motives for the adoption of the, in 1834–'37 685–697
——— ——— how adopted in Congress in 1834 (Benton) 696

Page.
United States: Silver the preferred metal for the Currency of the (Ingham, 1830) 576
——— Silver should be the Money Standard in the United States. See *R. Morris.*
——— Standard of Gold and Silver (1786) 450
Unity of Ratio. See *Ratio.*
Universal Money declared practicable by Mirabeau 299
Universal Gold Standard impracticable to-day, and more so in 1810 (Horton). 354
Vrolik. Mr. A., (Delegate of the Netherlands), prevented from attending the Conference by sickness 2
——— offers, through Count Rusconi, copy of address on the Monetary Question presented to the King of the Netherlands by the Netherlands Society for the Progress of Industry (Exhibit C, 7th session) 162
Waern. Mr. C. Fr., (Delegate of Sweden). Remarks 25, 83–84
Wages, Fall in, connected with fall in prices (Giffen) 398–399
Walker. General Francis A., (Delegate of United States). Explanations 24
——— Address to the Conference of 1878 73–79
Wear, loss of United States Coins by 589
Weight, Coins, Legal Tender, by (see *England, Statutes,* and for Dutch "*gross gelt*") 362, note.
Weights and Measures (see John Quincy Adams) 7
Welsh. Mr., United States Minister to England. Letter to Count Piper 19
West African Settlements and Gold Coast, Currency of 40
West Indies: English Colonies, circulation of depreciated Silver sustained to control foreign exchanges (Goschen) 39
——— history of the coins in circulation in, and change from the Double to the Single Standard 39–40
White. John, Cashier Bank of the United States, Baltimore—
——— Letter to Hon. S. D. Ingham, November 16, 1829, in answer to circular. (See *Ingham*) 620–629
——— Cashier Bank of the United States, Baltimore, 1829—
On Production of the Precious Metals after the Discovery of America 627–628
The great preponderance of Gold during the first years had no sensible effect upon its value in Silver 627
The enormous production of Silver from Potosi did not raise the value of Gold 627–628
The production after 1560 caused a fall in the values of both metals to near the present ratio 628
The products of the Brazilian mines after 1695 quadrupled the annual average of Gold, yet the value of Gold was raised in England in 1717. 628
The subsequent immense yield of Silver did not prevent a rise in that metal 628
Favors a single Silver standard for the United States 629
——— *Letter to Hon. S. D. Ingham on the Relation of Gold to Silver* (1830)
Analysis.
Advantage in shipping Gold for payments in France and England under our ratio of 15 656
In Hamburg Silver is the measure of value, ratio 14⅞ 657
Ratio in Holland 15⅝, formerly 14$\frac{7}{10}$ 657
The ratio 15½ in France, but Silver the chief medium of exchange 657
The United States currency is paper and our Gold is drained 658
British demand for Gold has given it a premium here 659
Have we suffered any loss on this account 659
Doubts that the recent rise in the value of Gold will be permanent 659–660
Not of sufficient duration to warrant legislative interference 660
Advocates a single standard of either metal as being less mutable than both 660
Silver preferred from convenience and previous habit 661
And from our neighborhood to Mexico 661
Paper and Coin of the same denomination will not circulate together 661
Reviews the recent monetary disasters and convulsions in the United States, and concludes that something must be wrong in our monetary system 662
Yen, the Japanese Trade Dollar, Legal Tender in Japan, Coinage of, &c. 140

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